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1950/51

Bulletin of the University of Wisconsin

MILWAUKEE EVENING CLASSES

Non-Credit; Undergraduate; Graduate

1950 - 1951



THE UNIVERSITY OF WISCONSIN
MILWAUKEE EXTENSION DIVISION

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UNIVERSITY OF ILLINOIS

SCHEDULE

The First Semester Schedule will be printed in the Sunday Milwaukee Journal and Milwaukee Sentinel, September 10.

MILWAUKEE
EVENING CLASSES

NON-CREDIT; UNDERGRADUATE; GRADUATE

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THE UNIVERSITY OF WISCONSIN
MILWAUKEE EXTENSION
DIVISION

623 West State Street (3)

Phone Daly 8-7660

CALENDAR

Academic Year 1950-1951

Evening Classes

FIRST SEMESTER

September 11-16	..... Monday-Saturday noon	Registration days
September 18	..... Monday	Instruction begins
September 30	..... Saturday noon	Late registration fee of \$1 in effect
November 23	..... Thursday	Thanksgiving Day, legal holiday
December 16-January 1 incl.	.....	Christmas Recess
January 22-26	..... Monday-Friday	Final Examinations

SECOND SEMESTER

January 29-February 3	Monday-Saturday noon	Registration days
February 5	..... Monday	Instruction begins
February 17	..... Saturday noon	Late registration fee of \$1 in effect
April 14-22 incl.	.....	Spring Recess
May 30	..... Wednesday	Memorial Day, legal holiday
June 4-8	..... Monday-Friday	Final Examinations

General Administrative Staff

Edwin Broun Fred, Ph.D., Sc.D., LL.D., President of the University

Lorentz H. Adolfson, Ph.D., Director, University Extension Division

Milwaukee Administrative Staff

George A. Parkinson, Ph.D., Director

Edward D. Holst, Ph.D., Assistant Director

Irene M. Bozak, B.A., Registrar

Evening Instructional Staff

Ahrens, William, Instructor in Management (Part-time)

Aumuellet, Ferdinand, Instructor in Advertising (Part-time)

Babcock, Mary R., M.A., Assistant Professor of English

Baldwin, Joseph E., M.A., Instructor in Social Work (Part-time)

Bardell, Ross H., Ph.D., Associate Professor of Mathematics

Barnett, Joseph R., Ph.B., LL.B., Instructor in Accounting (Part-time)

Bartels, Robert M., B.B.A., Instructor in Retailing (Part-time)

Batz, Prisca, M.A., Instructor in Secretarial Training (Part-time)

Berryman, Olin H., Instructor in Credits and Collections (Part-time)

Best, Martha, M.A., Instructor in French

Bierwagen, Paul A., B.A., Instructor in Sociology (Part-time)

Boerner, Edward A., M.A., Instructor in Art Education (Part-time)

Book, Ralph J., M.Ed., Instructor in Accounting (Part-time)

Brandt, Lawrence E., B.B.A., Instructor in Business English (Part-time)

Braun, Otto H., B.S., Instructor in Mechanical Engineering (Part-time)

Brevoort, Mrs. Margaret D., M.A., Instructor in Social Work (Part-time)

Brooks, Dudley C., M.A., Assistant Professor of English

Brown, Howard G., B.A., LL.B., Lecturer in Social Work (Part-time)

Burgess, James L., B.A., Instructor in English (Part-time)

Carman, Douglas, B.A., Instructor in Finance (Part-time)

Carpenter, Dorothy K., M.A., Instructor in English (Part-time)

Christman, Webster M., M.Ed., Assistant Professor of Drawing

Christopherson, B. Richard, M.A., Instructor in Political Science (Part-time)

Collins, Frank M., M.A., Lecturer in English

Cowee, John W., M.B.A., Instructor in Insurance (Madison)

Creamer, John J., B.A., LL.B., Associate Professor of English

Dahl, Sophus M., B.S., Instructor in Civil Engineering (Part-time)

Davis, Mrs. Lola M., M.A., Instructor in Remedial Reading

Dawe, W. Howard, M.A., Instructor in English

Deptula, Szymon St., M.A., Instructor in Polish and Russian

Doering, H. R., M.B.A., Assistant Professor of Commerce

Donner, Herbert O., C.P.A., Instructor in Accounting (Part-time)

Downing, Willard E., M.S.S., Associate Professor of Social Work

Dunning, Margaret H., M.A., Assistant Professor of Social Work

Engelmann, Mrs. Ruth G., M.A., Instructor in English (Part-time)

English, H. R., M.A., Professor of Business Administration (Extension Division, Madison)

Ernst, Dorothy J., Ph.D., Assistant Professor of History

Eschner, Carl F., Instructor in Management (Part-time)

Fink, Herman J., Instructor in Advertising (Part-time)

Freeman, Mrs. Mildred B., M.A., Instructor in English

Friedman, Sidney J., B.S., B.F.A., Instructor in Drawing

Froling, Leonard E., B.Ed., Instructor in Marketing (Part-time)

Garbe, Lester W., M.Ed., Instructor in Mathematics (Part-time)

Gaunt, Ruth M., M.A., Assistant Professor of Social Work

Gerdes, Victor B., B.S., Instructor in Insurance (Madison)

Gill, Norman N., Ph.B., Instructor in Political Science (Part-time)

Gittleman, Arnold G., M.B.A., Instructor in Marketing (Part-time)

Goldberg, Charles L., Ph.B., J.D., Instructor in Real Estate (Part-time)

Grossman, Philip W., Instructor in Real Estate (Part-time)

Guy, Benjamin F., Instructor in Management (Part-time)

Hafemeister, Lester D., B.S., Instructor in Advertising (Part-time)

Hagen, Willis W., B.A., Instructor in Accounting (Part-time)

Hammond, Loring T., B.A., Instructor in Salesmanship (Part-time)

Hansen, Raymond E., M.Ed., Instructor in Accounting (Part-time)

Hashek, Frank W., LL.B., Instructor in Traffic Management (Part-time)

Hille, Guenther H., B.S., Instructor in Metallurgy (Part-time)

Hodge, Edwin R., B.S., M.B.A., Assistant Professor of Commerce

Hodge, Mrs. Marie R., B.S., M.B.A., Instructor in Marketing (Part-time)

Hoffman, Richard W., B.A., C.P.A., Instructor in Accounting (Part-time)

Holmes, Mrs. Elisabeth K., M.A., Associate Professor of English

Holz, Marvin, LL.B., Instructor in Business Law (Part-time)

Holzbog, Walter C., B.S., Instructor in Liberal Education (Part-time)

Humber, Wilbur J., Ph.D., Instructor in Psychology (Part-time)

Ingersoll, Hugh D., M.S., Instructor in Political Science (Part-time)

Inskip, Wilma M., Ph.D., Assistant Professor of Psychology

Janzen, Cornelius C., Ph.D., Instructor in Economics (Part-time)

Jenkins, Floyd E., B.A., LL.B., Instructor in Business Law (Part-time)

Jennik, Edward F., B.S., Instructor in Accounting (Part-time)

John, Richard C., B.B.A., Instructor in Retailing (Part-time)

Kelley, William V., B.A., Instructor in Sociology (Part-time)

Kenny, Joseph W., M.A., Lecturer in Geography

Kinsey, Jack L., B.S., M.D., Instructor in Liberal Education (Part-time)

Kleiner, James L., Instructor in Mechanical Engineering (Part-time)

Knutsen, Harold W., B.C.E., Assistant Professor of Drawing

Kovich, Frank O., Instructor in Management (Part-time)

Kruse, Albert J., Ph.D., Associate Professor of German

Kunze, Harry L., M.A., J.D., C.P.A., Instructor in Accounting (Part-time)

Lawrence, Larry C., Instructor in Journalism (Part-time)

Lentz, Elmer W., Instructor in Real Estate (Part-time)

Linch, Albert, B.A., Instructor in Sociology (Part-time)

Lindenberg, George D., M.B.A., Instructor in Commerce

Luckes, Robert F., B.S., Instructor in Management (Part-time)

Maechler, Gerald C., B.S., Instructor in Astronomy (Part-time)

Maechler, Hugo C., B.S., Instructor in Drawing

Manierre, Samuel N., B.A., Instructor in Liberal Education (Part-time)

Mann, John W., B.S., Instructor in Mechanics

March, James H., M.B.A., C.P.A., Associate Professor of Commerce

Marden, Morris, Ph.D., Professor of Mathematics

Markey, Sydney B., B.A., M.S.A., Instructor in Social Work (Part-time)

Maronek, Frank R., Instructor in Mechanical Engineering (Part-time)

McCain, Allison B., B.A., Instructor in Mathematics (Part-time)

McLaughlin, Teddy J., M.A., Instructor in Speech

Meyers, John A., LL.B., Instructor in Management (Part-time)

Miles, Arthur P., Ph.D., Professor of Social Work (Madison)

Miller, Anne, M.S., Instructor in Social Work (Part-time)

Monnier, Charles M., M.A., Instructor in Speech

Morrison, Rowland W., B.S., Instructor in Drawing (Part-time)

Morton, Ruth, B.S., Instructor in Interior Decorating (Part-time)

Myers, Raymond H., M.A., Professor of Speech

Nance, R. Dale, Ph.D., Instructor in Psychology (Part-time)

Newcomer, Charles A., Ph.D., Assistant Professor of Spanish

Niles, Donald E., B.S., Instructor in Mechanics (Part-time)

Oestreich, Carl R., B.S., Associate Professor of Civil Engineering

Packham, William S., B.A., C.P.A., Instructor in Accounting (Part-time)

Pelikan, Alfred G., M.A., Instructor in Art (Part-time)

Person, Philip H., Ph.D., Professor of Sociology

Pillsbury, Mrs. Virginia N., M.A., Instructor in Mathematics (Part-time)

Porter, Donald R., B.B.A., Instructor in Business English (Part-time)

Purin, Alexander R., B.Ed., Instructor in Liberal Education (Part-time)

Randolph, Charles H., Instructor in Mechanical Engineering (Part-time)

Redmond, Mrs. L. Jane, M.A., Instructor in English (Part-time)

Richter, Walther, B.S., Instructor in Electrical Engineering (Part-time)

Riemenschneider, Carl E., B.S., Instructor in Architecture (Part-time)

Riesch, Anna Lou, Ph.M., Instructor in History

Roeming, Robert F., Ph.D., Assistant Professor of French

Roloff, Charles A., C.P.A., Instructor in Accounting (Part-time)

Sarles, Kenneth E., Instructor in Real Estate (Part-time)

Schaefer, James R., M.B.A., Instructor in Commerce

Scheffer, Guido L., Ph.D., Instructor in Real Estate and Economics (Part-time)

Schleck, Roth S., B.A., Instructor in Accounting (Part-time)

Schuetz, Edward J., Instructor in Mechanical Engineering (Part-time)

Schuld, Elmer G., M.A., Instructor in Mathematics

Schwartz, Donald A., M.Ph., Lecturer in Economics

Seibert, Martin J., C.P.A., Instructor in Management (Part-time)

Sellers, Mary H., M.A., Instructor in Anthropology

Shea, Donald R., M.A., Instructor in Political Science

Sheldon, David C., Ph.D., Assistant Professor of English

Shove, Mrs. Adrienne A., Instructor in Liberal Education (Part-time)

Skeen, Richard B., B.S., Instructor in Advertising (Part-time)

Spear, H. Gladys, B.A., M.D., Instructor in Social Work (Part-time)

Spitzbart, Abraham, Ph.D., Assistant Professor of Mathematics

Staudt, Henry P., B.S., Instructor in Management (Part-time)

Steinfort, Meta M., M.A., Professor of Spanish

Summ, Helmut, M. Ed., Assistant Professor of Art Education

Sweetland, Harriet M., M.A., Instructor in English

Teter, John W., Ph.D., Assistant Professor of Sociology

Thompson, John R., M.A., Instructor in Mathematics

Thuemler, Frederick C., B.E.E., Instructor in Drawing (Part-time)

Trythall, Donald L., M.Ed., Instructor in Accounting (Part-time)

Vanderburg, Bethumne, M.A., Instructor in Mathematics

Van Vleet, James G., M.S., Associate Professor of Mechanical Engineering

Veenendaal, Walter H., A.I.A., Instructor in Architectural Drafting (Part-time)

Verkkola, T. R., M.S., Assistant Professor of Mechanical Engineering

Voigt, Mrs. Frieda A., M.A., Assistant Professor of German

Vonier, Sprague B., B.A., Instructor in Public Relations (Part-time)

Wade, Chester, M.S., M.D., Instructor in Social Work (Part-time)

Walstead, Elliot N., LL.B., Instructor in Business Law (Part-time)

Warming, Troels, M.S., Associate Professor of Mechanical Engineering

Watson, Harold C., Ph.B., LL.B., Instructor in Insurance (Part-time)

Weil, Herman, Ph.D., Instructor in Psychology (Part-time)

Wendorf, Franklin C., B.S., Instructor in Drawing (Part-time)

Wilde, Frederick E.J., M.A., Instructor in History (Part-time)

Wissbaum, Donald J., B.Ed., C.P.A., Instructor in Commerce

Wolf, Louise A., Ph.D., Assistant Professor of Mathematics

Yaudes, Sydney S., Instructor in Insurance (Part-time)

Younk, Irwin J., Instructor in Management (Part-time)

GENERAL INFORMATION

Registration

Registration for all courses consists of filling out the necessary blanks provided at the General Office and the payment of required fees. **The student is not placed on the class roll until he has complied with this rule.**

Registration hours: Monday through Friday, 10:00 a.m.—9:30 p.m.; Saturday, 10:00 a.m.—1:00 p.m.

Fees

Non-credit courses: \$7.50 per semester hour up to and including seven hours. \$60.00 for eight or more semester hours.

Undergraduate courses: \$7.50 per credit up to and including seven credits. \$60.00 for eight or more credits.

Graduate courses: For students who have been admitted to the Graduate School of the University of Wisconsin, \$12.50 per credit up to and including four credits; \$60.00 for five or more credits. All other students, regardless of status, pay the undergraduate fee of \$7.50 per credit.

Note: Fees are subject to change without notice on action of the Board of Regents of the University.

All fees are payable at the time of registration. One dollar is charged for late registration.

Fee cards must be presented at the Library desk by students withdrawing books.

Refunds

All applications for refunds must be made in writing.

Refunds to students withdrawing from the evening classes are made upon the following basis if written notice is given at the time of withdrawal: withdrawal before and during the first week, 100%; during the second week, 80%; during the third and fourth weeks, 60%; during the fifth and sixth weeks, 40%; during the seventh and eighth weeks, 20%; and after the eighth week, no refund. **The date on which the student makes formal application for withdrawal is the official date of withdrawal.** Blanks for this purpose may be obtained in the General Office. In the case of twelve weeks' courses, there will be no refunds after the sixth week; in the case of courses less than twelve weeks, there will be no refunds after the second week.

In cases where a class is discontinued or the meeting day of the class is changed after a student has registered, the entire amount of the fees paid will be refunded upon the **written** application of the student.

No claim for refund or remission of other fees will be allowed, except when specially authorized by the Regents,

unless such claim is made within one year from the date of payment of fee. No fees will be refunded to a student who has been suspended for disciplinary reasons.

Transfers

During the first two weeks of classes students who transfer from one course to another will receive full credit for the original fee paid.

After the second week students who change courses are required to withdraw formally from the courses dropped and reregister for the ones newly chosen. They will receive a proportional refund as outlined above under the heading "Refunds." There will be no penalty for transfers from one course to another in the same department provided such transfers are recommended by the chairman of the department concerned.

Books and Supplies

In order to serve the student body effectively, a book store is maintained in which necessary texts and supplies may be purchased.

DAY CLASSES

It is possible to take a full schedule of subjects or to arrange a part-time program of day classes. For information, call or write the Registrar.

If a student desires to transfer to the day school, the record of his achievement in evening credit classes will be examined by the Scholarship Committee in order to determine the conditions under which such a transfer is to be made.

PSYCHOLOGICAL TESTING SERVICE

Individuals experiencing uncertainty regarding their choice of profession or training area may apply for psychological testing services. The tests are especially designed to furnish information concerning dominant interests, personality characteristics, specific aptitude levels, and psychological capabilities.

To cover the cost of test materials, administration, and scoring, a moderate fee is charged. The amount is dependent on the number of tests determined as necessary for the individual problem.

Information concerning this service may be obtained by calling Daly 8-7660.

INFORMATION FOR VETERANS

All veterans of World War II who served ninety days or more in the active military or naval service subsequent to September 16, 1940 and who hold a discharge other than dishon-

orable, are eligible for evening school instruction under the provisions of the Veterans Rehabilitation Act.

The expenses for tuition, fees, books and other necessary incidental supplies will be covered for all veterans certified under this act.

To establish eligibility for evening school education, the veteran student must present at the time of registration one of the following:

Public Law #346	Certificate of Eligibility (Form 7-1953)
Public Law #16	Authorization From Training Officer (Form 7-1905)
On-the-job trainee	Authorization for Related Instruction (Form 7-15, 16)

Application for Veterans Administration Form 7-1953 may be made and further information about these classifications may be obtained at the Regional Office of the Veterans Administration, 342 North Water Street, Milwaukee 2, Wisconsin. It is suggested that the veteran make application for educational benefits well in advance of the beginning of the semester.

The veteran will be required to pay cash for tuition and books in the event his eligibility for benefits has not been established at the time of registration. A refund computed in accordance with Veterans Administration instructions will be processed upon presentation of authorizing document to the Veterans Business Office, Room 107. Application for refunds must be made before June 20 of the fiscal year in which instruction is received.

Subsistence is granted to evening school veterans who can comply with the requirements of the Veterans Administration.

UNIVERSITY SERVICES AVAILABLE THROUGH THE UNIVERSITY EXTENSION DIVISION AT MADISON

EXTENSION TEACHING

Correspondence Study: More than 400 courses are available, including college or university courses; high school courses, for credit toward the local diploma; and non-credit courses, designed for self-improvement and advancement along professional or vocational lines.

Extension Classes: Full freshman and sophomore class programs which enable students to complete their basic college work in the home community are offered in several cities of the state, in addition to a wide range of late afternoon and evening classes for adults.

SPECIAL SERVICES

Visual aids, including sound and silent films, filmstrips, and lantern slides, are available to schools and civic organizations through the Bureau of Visual Instruction.

Advice on photography may be obtained through the Photographic Laboratory.

Business information is supplied upon request to the Bureau of Business Information.

Community counseling in regard to economic and social problems is available to individuals or groups in any Wisconsin community through the Bureau of Community Development.

Educational entertainment programs, lectures, and commencement addresses are offered to schools and organized civic groups through the Bureau of Lectures and Short Courses.

Package libraries, study aids, and a forensic association provide mediums through which the Bureau of Information and Program Services serves individuals and groups interested in the study and discussion of timely subjects.

Drama services are available through the Wisconsin Idea Theatre.

Worker groups are served by special classes and institutes sponsored by the School for Workers.

Management personnel of business and industry are provided with short courses by the Industrial Management Institute.

Aid in psychological research and program development is provided for business, labor, industrial, and civic organizations through the Bureau of Industrial Psychology.

Institutes for government officials and adult education in public affairs are provided by the Bureau of Government.

Information concerning any Extension service as well as aid in organizing local class or study groups may be obtained locally through University Field Representatives or the Extension Center Directors.

Additional information and bulletins on request

UNIVERSITY EXTENSION DIVISION

Madison 6, Wisconsin

BUSINESS

Certificate Courses

Increased specialization in commerce has dictated a need for highly specialized programs of study. Experience has shown that a person who is preparing for a business career will benefit more by completing a well-rounded program of study than by taking separate courses at random. The Department of Business has accordingly outlined programs of courses for students wishing to specialize in the fields of Accounting, Industrial Accounting, Marketing and Advertising, Finance and Credit, Industrial Management, Retailing, Real Estate, Secretarial Work, and General Business.

The University grants a certificate to the student who successfully completes the work required for any one of these specialized programs.

General Requirements for Certificate Programs

1. Twenty-four semester hours of work (ordinarily twelve courses) must be completed. Included in this requirement are specified required courses and a number of electives chosen by the student from a suggested list. **Note: Not all courses are offered each semester.**
2. No course is completed unless a final examination is taken.
3. An average grade of C is required.
4. At least one half of the required credits must be earned at the Milwaukee Extension Division. Certificate credit may be granted for college-level courses taken at other institutions. Transcripts should be submitted to the Registrar at an early date for evaluation.
5. A student will not be granted more than one twenty-four hour certificate. However, if he desires more extended study, the forty-hour course certificate in Business Administration described on page 15 is available.

TWENTY-FOUR HOUR CERTIFICATES

Accounting

Required Courses (twenty hours):

	Hours		Hours
Accounting 1C	3	Advanced Accounting 11 ..	2
Accounting 2C	3	Auditing 15a	2
Accounting 3	2	Business Law 101	2
Accounting 4	2	Business Law 102	2
Industrial Cost			
Accounting 9a	2		

Recommended Elective Courses:

Select courses totaling four hours from the following list. Other courses may be elected if prerequisites are met.

	Hours		Hours
Auditing 15b	2	Business Law 104	2
Business		Factory Management 601	2
Correspondence 702a	2	Governmental	
Business Economics		Accounting 34	1½
355a and 355b	4	Income Tax 42a and 42b ...	3
Business English 700	2	Office Management 354	2
Business Finance 137	2	Personal Finance and	
Business Law 103	2	Investments 403a	2
Industrial Cost Accounting 9b.2			

The student who intends to prepare for the C.P.A. examinations should plan to take more than the twenty-four semester hours which are required for the accounting certificate. A statement of the requirements for the C.P.A. certificate will be supplied upon request.

Industrial Accounting

Required Courses (Twenty-four hours):

	Hours		Hours
Accounting 1C and 2C or		Factory Management 601	2
Accounting 1, 2a, and 2b ..	6	Motion and Time	
Accounting 3	2	Study 250a	2
Accounting 4	2	Motion and Time Study 250b	2
Industrial Cost		Production Planning and	
Accounting 9a	2	Control 251	2
Industrial Cost		Cost Control 358	2
Accounting 9b	2		

Finance and Credit

Required Courses (eighteen hours):

	Hours		Hours
Business Management 350 ...	2	Business Finance 137	2
Accounting 1, 2a, and 2b or		Personal Finance and	
Accounting 1C and 2C	6	Investments 403a	2
Credits and Collections 131 ..	2	Business Law 101	2
		Business Law 102	2

Recommended Elective Courses:

Select courses totaling six hours from the following list. Other courses may be elected if prerequisites are met.

	Hours		Hours
Accounting 3	2	Business Law 103	2
Accounting 4	2	Business Law 104	2
Income Tax 42a and 42b	3	Real Estate Financing 309 ..	2
Business Economics 355a	2	Casualty, Surety, and	
Business English 700	2	Fire Insurance I	2
Business	*	Office Management 354	2
Correspondence 702a	2		

Marketing and Advertising

Required Courses (eighteen hours):

	Hours		Hours
Business Management 350 ...	2	Advertising Campaigns 504 ..	2
Business English 700	2	Business Law 101	2
Business		Business Law 102	2
Correspondence 702a	2	Salesmanship 500a	2
Marketing Practice 501	2		
Advertising Principles 502 ...	2		

Recommended Elective Courses:

Select courses totaling six hours from the following list. Other courses may be elected if prerequisites are met.

	Hours		Hours
Business Economics 355a	2	Credits and Collections 131	2
Accounting 1	2	Business Law 103	2
Accounting 2a	2	Personnel Management 351	2
Accounting 2b	2	Public Speaking 7	2
or Accounting 1C	3	Retail Advertising and	
Accounting 2C	3	Sales Promotion 525	2
Business Statistics 406	2	Retail Store	
Business Finance 137	2	Management 526	2
Advertising Copy Writing		Sales Management 527	2
512a	2	Industrial Marketing 515	2
Advertising Copy Writing		Principles of Wholesaling	
512b	2	518	2

Industrial Management**Required Courses** (twenty-two hours):

	Hours		Hours
Business Management 350	2	Personnel Management 351	2
Accounting 1, 2a, and 2b or		Factory Management 601	2
Accounting 1C and 2C	6	Motion and Time	
Industrial Cost		Study 250a	2
Accounting 9a	2	Motion and Time	
Industrial Cost		Study 250b	2
Accounting 9b	2	Production Planning and	
		Control 251	2

Recommended Elective Courses:

Select one course from the following list.

Any other course may be elected if prerequisites are met.

	Hours		Hours
Accounting 3	2	Industrial Supervision 357	2
Business English 700	2	Business Law 101	2
Business		Cost Control 358	2
Correspondence 702a	2	Public Speaking 7	2
Business Economics 355a	2	Plant Layout 359	2

Retailing

(Formerly Management of Small Business)

Required Courses (eighteen or twenty hours):

	Hours		Hours
Management of a		Business Law 101	2
Small Business 349	2	Business Law 102	2
Accounting 1 and 2a	4	Retail Advertising and	
or Accounting 1C	or	Sales Promotion 525	2
and 2C	6	Salesmanship 500a	2
Business English 700	2		
Business			
Correspondence 702a	2		

Recommended Elective Courses:

Select courses totaling four or six hours from the following list. Other courses may be elected if prerequisites are met.

	Hours		Hours
Accounting 2b	2	Credits and Collections 131	2
Retail Buying and		Public Speaking 7	2
Merchandising 530	2	Advertising Principles 502	2
Retail Store		Business Economics 355a	2
Management 526	2		

Secretarial Work**Required Courses** (nine or ten hours):

	Hours		Hours
Business Management 350	2	Accounting 1 and 2a	3
Business		or	or
Correspondence 702a	2	Accounting 1C	4
		Secretarial Training 714	2

Recommended Elective Courses:

Select courses totaling fourteen or fifteen hours from the following list. Other courses may be elected if prerequisites are met.

	Hours		Hours
Business English 700	2	Marketing Practice 501	2
Accounting 2b	2	Advertising Principles 502	2
or Accounting 2C	3	Salesmanship 500a	2
Shorthand Speed		Business Finance 137	2
Building 717a	2	Personal Finance and	
Shorthand Speed Building 717b	2	Investments 403a	2
Business Economics 355a	2	Personnel Management 351	2
Business Law 101	2	Office Management 354	2
Business Law 102	2		
Public Speaking 7	2		

Those students who know definitely in what field they are preparing to do secretarial work should go beyond the subjects listed on these pages and choose electives from business courses in the field selected such as Advertising, Accounting, Finance, or Real Estate.

Before a certificate in Secretarial Work is granted, the candidate must show proficiency in shorthand and typing.

General Business

Required Courses (fourteen or sixteen hours):

	Hours		Hours
Business Management 350	2	Business Correspondence 702a	2
Business Law 101	2	Marketing Practice 501	2
Accounting 1 and 2a	4	Business Finance 137	2
or Accounting 1C	or		
and 2C	6		

Recommended Elective Courses:

Select courses totaling eight or ten hours from the following list. Other courses may be elected if prerequisites are met.

	Hours		Hours
Accounting 2b or 3	2	Office Management 354	2
Advertising Principles 502	2	Personnel Management 351	2
Business English 700	2	Public Speaking 7, 13, or 707	2
Business Economics 355a	2	Salesmanship 500a	2
Business Law			
102, 103, or 104	2		

Business Administration

A forty-hour certificate in Business Administration is offered for those who wish to take a more extended program of training than is provided in the preceding certificate courses.

Required Courses (thirty hours):

	Hours		Hours
Accounting 1C and 2C or		Business Management 350	2
Accounting 1, 2a, and 2b	6	Factory Management 601	2
Accounting 3	2	Business Law 101	2
Public Speaking 7	2	Business Law 102	2
Business		Business Finance 137	2
Correspondence 702a	2	Marketing Practice 501	2
Business Economics 355a	2	Personnel Management 351	2
Business Economics 355b	2		

Elective Courses:

The ten hours of additional courses for this certificate may be elected from any of the other business courses.

Students who have received one of the twenty-four hour certificates may obtain this certificate by taking sixteen additional hours, provided they are selected from those listed above.

Real Estate

The Milwaukee Real Estate Board will issue an official certificate to anyone who is certified by the Milwaukee Extension Division of the University of Wisconsin as having satisfactorily completed six of the Real Estate courses listed below.

A University certificate endorsed by the National Association of Real Estate Boards will be issued to students who satisfactorily complete eight of the Real Estate courses listed below and four electives from the general field of business.

	Hours		Hours
Fundamentals of Real		Real Estate Selling 311	2
Estate Practice 306	2	Real Estate	
Principles of Real		Appraisals 310a	2
Estate Law 308	2	Real Estate	
Real Estate Financing 309	2	Appraisals 310b	2
Land Economics 313	2	Property Management 312a	2
Examination of Titles to		Property Management 312b	2
Real Property 201	2		

DESCRIPTION OF COURSES

ACCOUNTING

The introductory accounting courses are intended to provide (1) an introduction to the subject for students who intend to specialize in accounting, (2) vocational training in bookkeeping for those who wish to qualify to take charge of a simple set of books or to work under supervision on a more complicated set, and (3) an understanding of the fundamentals of accounting for those who are preparing for positions in other branches of the business field. Emphasis is placed upon modern methods of accounting for executive control.

The homework assignments consist of the study of a text and the solution of practical problems. Class periods are devoted to lectures, blackboard illustrations, and the discussion of questions and problems. The student is given the opportunity to obtain individual assistance from the instructor.

Note: There is a choice of two series of courses, identical in content covering the subject of introductory accounting. One series consists of Courses 1C and 2C and requires two semesters to complete. Classes in this series meet three hours a week. The other series consists of Courses 1, 2a, and 2b and requires three semesters to complete. Classes in this series meet two hours each week.

1C. Introductory Accounting. (Meeting three hours a week.)

No previous training in bookkeeping or accounting is required for entrance to this course. The topics studied are: Balance sheet accounts; income and expense accounts; debit and credit; journalizing and posting; capital and revenue expenditures; adjusting and closing the books; work sheets; accrued and prepaid items; bad debts; depreciation; negotiable instruments; purchases; sales; bank reconciliation.

2C. Introductory Accounting. (Meeting three hours a week.)

A continuation of Introductory Accounting 1C, this course covers the following topics: General and subsidiary ledgers; controlling accounts; columnar journals; petty cash journal; payrolls and payroll taxes; plant ledger; partnerships; corporation accounting; reserves and funds; bonds; manufacturing accounts and statements; voucher system; analysis of financial statements. A practice set is assigned illustrating the accounting procedure of a corporation engaged in manufacturing.

Prerequisite: Introductory Accounting 1C or consent of the instructor.

1. Introductory Accounting.

No previous training in bookkeeping or accounting is required for entrance to this course. The topics studied are: Balance sheet accounts; income and expense accounts; debit and credit; journalizing and posting; capital and revenue expenditures; adjusting and closing the books; work sheets.

2a. Introductory Accounting.

A continuation of Introductory Accounting 1, this course covers the following topics: Accrued and prepaid items; bad debts; depreciation; negotiable instruments; purchases; sales; bank reconciliation; general and subsidiary ledgers; controlling accounts; columnar journals; petty cash journal; payrolls and payroll taxes; plant ledger; partnerships.

Prerequisite: Introductory Accounting 1 or consent of the instructor.

2b. Introductory Accounting.

A continuation of Introductory Accounting 2a, this course covers the following topics: Corporation accounting; reserves and funds; bonds; manufacturing accounts and statements; voucher system; analysis of financial statements. A practice set is assigned illustrating the accounting procedure of a corporation engaged in manufacturing.

Prerequisite: Introductory Accounting 2a or consent of the instructor.

3. Intermediate Accounting.

In the intermediate accounting courses (3 and 4) a study is made of accounting principles underlying the presentation of financial statements. Accounting classification and accounting valuation are central topics. Consideration is given to what constitutes adequate disclosure of significant information. Problems are assigned to illustrate the application of accounting theory.

The following topics are studied in Intermediate Accounting 3: Classification of accounts; review of work sheets and adjustments; form and content of balance sheet, income statement, and surplus statement; partnerships; corporations; cash receivables; inventories.

Prerequisite: Introductory Accounting 2C or the equivalent.

4. Intermediate Accounting.

This course is a continuation of Course 3. The topics covered are: Compound interest and annuities; tangible fixed assets; depreciation; appreciation; intangible fixed assets; investments; liabilities; funds and reserves; analyses of financial statements, of variation in working capital, and of profit variation.

Prerequisite: Intermediate Accounting 3 or the equivalent.

9a. Industrial Cost Accounting.

The following topics are covered: Relationship of cost accounting to management; cost classification; methods of determining product costs; ledger procedure in job-order, standard, and process cost systems.

Prerequisite: Introductory Accounting 2C or the equivalent.

9b. Industrial Cost Accounting.

This course is a continuation of Industrial Cost Accounting 9a. The following topics are covered: Purchases, material, labor, burden, analysis of variances, variable budgets. Throughout the course emphasis is placed upon the development of accounting procedures to aid management in the control of costs.

Prerequisite: Industrial Cost Accounting 9a.

358. Cost Control (See page 32.)

11. Advanced Accounting.

Partnership dissolution, joint ventures, consignments, installment sales, insurance, bankruptcy, statement of affairs, receiverships, estates and trusts, and branches are the topics covered in this course. Emphasis is placed upon the solution of practical accounting problems.

Prerequisite: Intermediate Accounting 4 or the equivalent.

12. Consolidated Statements.

Principles and techniques involved in the preparation of consolidated financial statements are studied in this course. Emphasis is placed upon the use of consolidated working papers. Mergers and corporate refinancing are also considered.

Prerequisite: Intermediate Accounting 4 or the equivalent.

15a. Auditing.

The principles and procedures followed by independent public accountants in verifying financial statements are outlined in this course. The topics treated are: Types of audits; audit program; internal check; working papers; verification of cash, receivables, inventories, property accounts, other assets, current and contingent liabilities, funded debt, capital and surplus accounts, income and expenses; auditor's certificates and reports; legal rights and responsibilities of auditors.

Prerequisite: Intermediate Accounting 4 or the equivalent.

16. Internal Auditing.

Internal auditing is "the independent appraisal activity within an organization for the review of the accounting, financial, and other operations as a basis for protective and con-

structive service to management." To perform this function effectively many corporations find it desirable to employ a staff of internal auditors. These are generally persons who have had training and experience in accounting and who have a broad understanding of the problems of operating management.

The course is a study of the principles and the techniques of internal auditing. It is given with the cooperation of the Milwaukee chapter of the Institute of Internal Auditors. Members of the chapter participate as guest speakers. The following topics are covered: Nature and scope of internal auditing; internal check and audit; internal auditing and human relations; programs, working papers and reports; audit of cash; sales and receivables; investments and subsidiary companies; inventories; fixed and other assets; purchases and payables, other liabilities; ownership equities, income and expense, manufacturing costs; organization and operation; special studies; coordination with the work of the public accountant; summary.

Prerequisites: Industrial Cost Accounting 9b and Auditing 15a or consent of the instructor.

34. Governmental Accounting.

Dealing chiefly with municipal accounting procedure, this course covers the following topics: General characteristics of the accounts of governmental units; expendable revenue funds; budgets; appropriations, encumbrances, expenditures, and disbursements; revenues and receipts; bond funds; special assessment funds; sinking funds; trust funds; revolving funds; capital outlays; and funded debt. Account classifications for cities and counties which have been developed by the Municipal Accounting Division of the Wisconsin Department of State Audit are discussed, and questions on governmental accounting from the Wisconsin C.P.A. examinations are studied.

Prerequisite: Accounting 2C or its equivalent and preferably Accounting 3, 4, and 9a also.

35. C.P.A. Review.

A review of accounting theory, auditing, and accounting practice, this course is designed for advanced students who are preparing to take the examinations for the Certified Public Accountant's Certificate. Problems and questions selected from the Uniform C.P.A. Examinations of the American Institute of Accountants are assigned at each meeting. The solutions and the accounting principles involved are fully discussed. Emphasis is placed on the method of attacking problems and on the proper presentation of work done.

The class meets three hours each Friday evening for seventeen weeks beginning in July. Approximately two hours of each meeting are spent on problems and one hour on accounting theory and auditing.

Prerequisites: Accounting 9a, 11, 12 and 15a or consent of the instructor.

42a. Income Tax Procedure.

The laws and regulations covering federal income taxes are studied and their application is illustrated by practical problems. The principal topics are: Taxable income, recognition of gain or loss, basis for gain or loss, capital gains and losses, deductions, returns of individuals. Although the textbook deals only with federal taxes, considerable attention is given in class to Wisconsin income taxes. The course is open to students who have had training in accounting and to others with the consent of the instructor.

42b. Income Tax Procedure.

This is an advanced course which deals with the preparation of federal and state income tax returns for various classes of taxpayers, particularly partnerships, estates, trusts, and corporations. Special topics covered include inventories, cash basis and accrual basis accounting, installment sales, estate and inheritance taxes and gift taxes. The course is intended for those who have had previous training and experience in accounting and income tax procedure.

43. Current Income Tax Problems.

This is a short course covering income tax problems of current importance. Recent changes in tax laws and regulations and recent court decisions are reviewed with particular reference to corporation income taxes. The course is an advanced course intended for accountants and lawyers who have had previous training and experience in income tax procedure. It will ordinarily be scheduled to meet once a week for six weeks during October and November.

ADVERTISING

502. Advertising Principles.

Intended primarily for the beginner in advertising, this course gives the student a thorough grasp of advertising principles and the various steps in the preparation of advertisements and advertising literature. The topics discussed include the planning and writing of copy; making the layout; producing the advertisement through the steps of art work, engraving, typography, and printing; and the various advertising mediums, such as magazines, newspapers, trade papers, radio, direct mail, and outdoor mediums.

504. Advertising Campaigns.

This is a practical course devoted to the planning and execution of complete advertising campaigns. It includes such

topics as: Correlation of advertising and merchandising efforts; the merchandising channels; planning the campaign; creating the advertisements, literature, and auxiliary advertising forms. Students are required to work out actual campaigns. The functions of an advertising agency and its relation to the advertiser are discussed.

512a. Advertising Copy Writing.

This is a comprehensive course which covers, in as much detail as the time allows, sources of facts, the technique of creating ideas, headlines, and types of body copy, and their application to theoretical problems in publication copy writing. Radio and television writing are briefly discussed.

Prerequisite: One year of college English or the equivalent.

512b. Advertising Copy Writing.

This is a critical course in writing for publication in the advertising field, covering national magazines, newspapers, trade journals, and publicity. A major portion of the time available is spent in actual writing and in the editing of work submitted by the student.

Prerequisite: Consent of the instructor.

525. Retail Advertising and Sales Promotion.

The purpose of this course is to give the individual now engaged in retailing and the student who proposes a retail career a survey of the principles and current developments in retail advertising and sales promotion.

Primary attention is given to the administration and planning of sales promotion activities in retail stores of various types. The principles of advertising production are reviewed. A cataloguing and an evaluation of various publicity media available to the retailer are presented with a view to effective use of these media on proper occasion.

Basic window and interior display techniques, retail market research and sales analysis are also discussed.

528. Opportunities in Advertising.

Highlights of every phase of practical present-day advertising are presented by outstanding leaders in the fields of copy writing, layout, art, production, media such as newspapers, magazines, radio, and direct mail; there are also sessions on retail and industrial advertising and research. The course is conducted under the auspices and with the cooperation of the Milwaukee Advertising Club. It is a good "refresher" course for men and women already engaged in advertising and the graphic arts; it will serve as a good foundation course for others.

BUSINESS ECONOMICS

355a. Business Economics.

This course aims to introduce students interested in business careers to a knowledge of economic institutions and practices that business men should find helpful.

Topics studied include types of business organizations, large-scale capitalistic combinations, labor organizations and their policies, money and credit, and the federal reserve banking system, and factors determining market prices.

The course is recommended to those who are preparing for the C.P.A. examinations in economics and can be applied toward the certificate program of the National Institute of Credit.

355b. Business Economics.

In the second semester emphasis is given to business-cycle theory and the Babson and Harvard systems of business forecasting. Other topics studied include the interdependence of consumption and production, spending and saving, insurance, government finance, economic policies of government and the system of capitalism and regulated competitive enterprise.

360. Economics of International Trade.

This course is planned as an introduction to the field of international trade. The following subjects are discussed: National economic and political policies; international interdependence; population problems; industrial resources; a short survey of historical development; Great Britain's free trade policies; the gold standard; paper currencies; commercial treaties; the Bretton Woods agreements; the present position of the United States in world economy.

Prerequisite: A basic course in economics or consent of the instructor.

BUSINESS ENGLISH AND BUSINESS CORRESPONDENCE

700. Business English.

In this course special emphasis is given to the practical application of correct English in modern business writing and speaking. Considerable use is made of current material to illustrate effective business English. Numerous oral and written exercises enable the student to apply his knowledge.

Among the subjects receiving special attention are: Vocabulary development; use of the dictionary; spelling; pronunciation; sentence structure; grammar review; punctuation; and effective written expression.

702a. Business Correspondence.

The aim of this course is to provide practice in writing correct and effective business letters. Among the types of letter

discussed are the following: Sales; follow-up; credit and collection; adjustment; inquiry; and acknowledgement. Actual business letters are analyzed for the essential qualities of business writing.

703. Business Report Writing.

After the principles of exposition have been covered thoroughly, each student is coached in the writing of reports on subjects connected with the field of business in which he is specializing.

Among the topics covered are: Forms of exposition used in report writing; methods of developing a topic; what constitutes a good business report; gathering and organizing material for a report; adapting the report to the reader; essentials of good style in business reports; preparing the manuscript; writing various types of reports and preparing articles for business publications.

(For other courses in writing, see English, page 59 and Journalism, page 64.)

BUSINESS LAW

The courses in Business Law are of practical value for all business students. They are especially recommended for those intending to take the examination for the Certified Public Accountant Certificate.

101. The Law of Contracts and Agency.

The first six weeks of the course are devoted to the study of a general view of the history and development of the law as a whole with emphasis on its practical applications. The remainder of the course deals principally with the laws of contracts, particularly the formation of contracts, operation of contracts, discharge and enforcement of right under contracts. The relation of principal and agent and the law of agency in general are made a part of the course.

102. The Law of Sales and Negotiable Instruments.

In a simple practical way the course presents the things that business men should know about the principles underlying the law of: (1) the purchase and sale of goods or services, (2) negotiable instruments, and (3) the personal property ownership and transfer.

103. The Law of Partnerships and Corporations.

The course deals chiefly with partnerships and corporations and their respective legal advantages and disadvantages as business organizations. The uniform partnership act and the Wis-

consin corporation laws are fully discussed. Some time is given to recent laws covering the reorganization and dissolution of business organizations.

104. The Law of Wills, Trusts, Estates, and Real Property.

The course offers a background in the law of wills and estates; ownership and transfer of real property; and trusts, including the validity of trusts as governed by the rule against perpetuity.

210. Patents and the United States Patent System.

The history and development of the United States patent system, the organization of the Patent Office, and the procedure for protecting patent applications are covered in this course. Attention is given to the evaluating of patents, the methods in use for the commercial exploitation of patents, and the economic effects of the patent system.

The course should be of value to engineers, executives, and others who are concerned with the development and exploitation of patentable inventions. Law students contemplating specialization in patent law and those now preparing for examination to practice Patent Law will find this course valuable.

CREDIT

131. Credits and Collections.

The scope of the course is sufficiently broad to appeal to anyone who is concerned with credit and collection work in business.

Among the topics discussed are: The economics of credit; the work of credit bureaus and agencies; analysis of financial statements; installment credit and collections; collection strategy by letter, telephone, or personal contact; credit and collection letters; legal aspects of credit and collections.

132. Advanced Credits and Collections.

This course is intended as a continuation of the beginning course in Credits and Collections. Some of the topics discussed are: Scope and reliability of sources of credit information; survey of the credit field with respect to bad debt losses; use of financial statements; problems involved in various statements; use and analysis of credit interchange reports; how and where management policies may affect credit; factors which may affect credit policies; government controls in relation to credit; pitfalls to be avoided in giving out information; policies and methods of determining credit limits; handling the insolvent account; problems of the credit manager.

FINANCE

137. Business Finance.

All important business policies must justify themselves in terms of financial results. The basic purpose of this course is to present those financial policies and techniques that have proved their value in the business world. The course will appeal to all who want to broaden their knowledge of business and prepare for greater responsibilities.

Among the subjects discussed are: Discovering business and profit opportunities; organizing and financing an enterprise; managerial forms and charts; executive's financial records and reports; financial analysis; banking relations; business forecasting methods; preventing business failures; business risks and how to meet them.

403a. Personal Finance and Investments.

Practical ways of getting ahead financially are stressed in the course, with emphasis on investment fundamentals. The personal finance section of the course considers such problems as life insurance programming, protecting dependents, providing for one's own future, ways of saving money, and home ownership versus renting.

The major portion of the lecture period is devoted to a study of the different types of investments (bonds, stocks, mortgages, etc.), the investment merits and risks inherent in the various industries, and fundamental investment policies. The importance of analyzing market trends is stressed.

Students are not only taught how to read and analyze the daily financial page and financial statements, but are also given the opportunity to use stock and bond manuals and leading financial periodicals.

INSURANCE

C.L.U. Review Courses.

In cooperation with the Milwaukee Chapter of Chartered Life Underwriters, the University offers a program of four courses for men and women who are preparing for the C.L.U. examinations. Those courses which are not given in 1950-51 will be offered in subsequent years.

The courses and the subject matter covered are as follows:

Part A. Life Insurance Fundamentals 2 semesters.

1. Economic and social functions
2. Principles and practices

Part B. General Education 2 semesters.

1. Economics
2. Government
3. Sociology

Part C. Law, Trusts, and Taxes 2 semesters.

1. General commercial law, including law of life insurance
2. Wills, trusts, and estates
3. Taxation and business insurance

Part D. Finance 2 semesters.

1. Corporation finance
2. Banking and credit
3. Investments

C.P.C.U. Review Courses.

The Milwaukee Extension Division has established a series of five review courses to prepare persons to pass the examinations leading to the designation C.P.C.U. (Chartered Property and Casualty Underwriter). The program is offered in cooperation with the insurance industry in the greater Milwaukee area and the American Institute for Property and Liability Underwriters, Inc. Those courses which are not given in 1950-51 will be offered in subsequent years.

The courses and the subject matter covered are as follows:

Part I. Insurance Principles and Practices. 2 semesters.

The economics of insurance; the insurance mechanism; contract provisions (the risk assumed, other provisions); types of carriers (including self-insurers); agency and brokerage; financial statements; investments; organization of carriers (internal, inter-carrier); state regulation and supervision.

Part II. Insurance Principles and Practices. 2 semesters.

Theory of probability; rates and rating; reserves; underwriting and selection of risks; loss adjustments; loss prevention (fire prevention and protection, automobile accident prevention, industrial accident prevention, prevention of, and protection against, other perils); client building (principles of personal salesmanship, principles of applied psychology, insurance surveys).

Part III. General Education. 2 semesters.

Economics; government; social legislation (workmen's compensation and employers' liability laws, building and other safety laws, automobile financial responsibility laws, the Social Security Act); English (emphasis upon grammar, spelling, punctuation, paragraphing, and other factors essential to the writing of good English).

Part IV. Law. 2 semesters.

General commercial law; law pertaining to contracts, agency, partnerships, corporations, personal property, real estate and

mortgages, negotiable instruments, bankruptcy, bailments, common and private carriers, negligence; insurance law (including construction of insurance contracts).

Part V. Accounting and Finance.

2 semesters.

Principles of accounting; principles of personal finance; business organization and agency management.

Casualty, Surety, Fire, and Accident and Health Insurance.

In cooperation with the Wisconsin Association of Insurance Agents and the Accident and Health Underwriters of Milwaukee, the Milwaukee Extension Division offers a comprehensive program of courses in all lines of insurance under the above general classifications. The program has been developed by the National Association of Insurance Agents and is regarded as one of the finest available.

The introductory course is designed to meet the everyday needs of local agents and agency employees who are new in the property and casualty fields, but it is also recommended for insurance buyers and for persons who wish to acquire a basic knowledge of insurance in general. Courses II, III, IV, and V are each divided into specialized units which cover particular types of insurance. Course VI is the well-known Taylor course and is devoted entirely to Accident and Health Insurance.

Students will receive the N.A.I.A. Certificate of Completion for each unit or course they finish. Those who successfully complete the whole program of six courses will be awarded the N.A.I.A. Certificate of Merit.

Casualty, Surety, and Fire Insurance I.

(Introductory course).

Introduction to the Insurance Business as a Whole: History and development of insurance; functions of the insurance industry—insurance as the way to better living, risks assumed by the insurance companies, types of insurers, company organization, inter-company organizations, marketing and distribution of insurance; the language of insurance; the future for the general insurance business.

The Agency and Its Work: The local agent; office production; rates and premiums and their computation; loss adjustments.

Fire Insurance: Its purpose; historical development and financial growth; what it does; the standard fire policy—its history and development, the basic elements, provisions, and stipulations.

Inland Marine Insurance: History and development; transportation insurance; personal property insurance.

Automobile Insurance: History and development of automobile insurance; automobile material damage insurance; analysis of the standard automobile insurance policy; automobile liability insurance; the standard automobile liability policy.

Casualty Insurance: Casualty insurance: personal insurance; property insurance; liability insurance.

Casualty, Surety, and Fire Insurance II.

Fire Insurance and Allied Lines: Historical backgrounds of standard fire policies; analysis of the standard fire policy conditions and forms; other property insurance contracts; other property and collateral fire insurance contracts; reporting forms; consequential loss contracts; business interruption insurance; general rules and regulations of fire insurance and allied lines, rates and rating.

Time Element Insurance: Use and occupancy; business interruption; extra expense; leasehold; other consequential loss contracts.

Inland Marine Insurance: Historical development of inland marine insurance; development of the Inland Marine Underwriters Association (I.M.U.A.) and the nationwide definition and interpretation of the insuring powers of marine and transportation underwriters; purpose, formation, and operation of the I.M.U.A.; the personal property floater; commercial inland marine lines.

Casualty, Surety, and Fire Insurance III.

Public Liability Insurance: The law of negligence; organization of liability insurance; manufacturer's and contractor's public liability insurance; owners', landlords', and tenants' public liability coverage; elevator public liability insurance; owners' or contractors' protective liability insurance; product liability insurance; contractual liability insurance; comprehensive liability insurance.

Workmen's Compensation Insurance: Development of employer's liability insurance; development of workmen's compensation; workmen's compensation insurance coverage.

Automobile Material Damage and Liability Insurance: Automobile material damages; analysis and explanation of the standard automobile liability policy; ratings; combination and comprehensive automobile coverages; analysis and explanation of the standard garage liability policy.

Casualty, Surety, and Fire Insurance IV.

Burglary and Glass Insurance: Construction of a typical burglary policy; other robbery, burglary, and miscellaneous policies; all risks policies; bank insurance; plate glass insurance.

Boiler and Machinery Insurance: History and development of boiler and machinery insurance; engineering inspection service; analysis of the insuring agreement and policy conditions; policy schedules and endorsements; the rating structure; a sales program.

Fidelity and Surety Bonds: A brief history and development of suretyship; analysis of the kinds of fidelity bonds; judicial bonds and miscellaneous bonds; construction contract bonds.

Aviation Insurance: A brief history and development of the aviation industry and aviation insurance; aircraft hull policies; aircraft liability policies; aviation accident insurance policies;

admitted liability coverages; airport and air-meet liability; hangar keeper's liability; workmen's compensation and employer's liability insurance; products liability; federal supervision bodies for aviation.

Casualty, Surety, and Fire Insurance V.

Agency Management: Production planning; sales and other records; survey selling; advertising and public relations; profit planning organization and management.

State Insurance Regulations: Development of state regulation; individual state insurance statutes; organization, administration, and operation of the insurance department; general requirements of insurance companies; taxation, fees, and charges; workmen's compensation; motor vehicle financial responsibility; control of agents, solicitors, and brokers by the insurance department.

Public Relations: Who and what makes up the public's mind; the publics of public opinion; how the public judges an insurance agent; public relations at work.

Accident and Health Insurance VI.

Why Accident and Health Insurance Is Primary Insurance: The policy and the public (what standard provisions mean to the prospect and to the public; insuring clause and indemnities as salient features of the sale; riders and waivers); how to lay out an accident and health career; measuring rods for field work; prospecting plans and methods; third party influence on sales power; pre-approach from many angles; approval and presentation; answering objections; closing and delivering policy; visual methods; pad and pencil; a personal exhibit book.

MANAGEMENT

349. Management of a Small Business. (See page 41.)

350. Business Management.

A broad view of business organization and management is gained from this course, which covers the activities, problems, and interrelationships of the principal departments of a business enterprise. Especial attention is given to the basic principles upon which successful operation depends. The point of view is practical. By giving the student a better understanding of business activities and problems, the course will increase his usefulness to his company.

Among the topics discussed are: Forms of business organization; initiating an enterprise; organization of the sales, finance, accounting, and manufacturing departments; some problems involved in financing, selling, and manufacturing; business failures, their causes and prevention; the interrelationships of departments.

601. Factory Management.

The course covers the following topics: General factory organization; determination of methods (routing and motion study); plant location and layout; selection of materials and equipment; materials control; quality control; production control; scheduling and dispatching; wage incentives; cost control and budgets. Attention is given to the basic principles underlying these various functions and to their coordination in an integrated manufacturing unit.

This course is intended primarily for foremen, superintendents, time-study men, production planners, industrial engineers and accountants.

251. Production Planning and Control.

The course deals with the principles and practices of production planning and control as applied in manufacturing. It is intended to give the student a comprehensive picture of the functions of a production control department, the principles involved in controlling production, and examples of how production is controlled in actual practice. The topics covered include: Sales and production forecasting; production planning; scheduling; procurement of materials; dispatching; follow-up and coordination of production; inventory control.

250a. Motion and Time Study.

The course covers the following topics: Introduction to motion study; process charts and operation analysis; plant layout; use and analysis of micromotion study; film analysis; micromotion study equipment; fatigue study; principles of motion economy as related to the human body, to the work place, and to tools and equipment; study of wage incentives; motion study and wage incentives application; job evaluation and base rate study.

Machine shop experience is desirable.

250b. Motion and Time Study.

The topics covered are: Introduction to stop-watch time study; elements of time study; time study equipment; job breakdown; case study; actual practice; determination of time standards—rating factor; selling a cost reduction program to management; training the operator; merit rating; progress and follow-up.

Prerequisite: Motion and Time Study 250a or consent of the instructor.

359. Plant Layout.

A study is first made of the factors to be considered in making plant layouts. Among these factors are: Type of manufacture; sequence of operations; equipment required for different

production schedules; building types; lighting and ventilation; location of exits and entrances and of service facilities such as washrooms, tool cribs, and offices; material handling and storage.

This study is followed by an outline of layout procedures. The use of templates, models, and flow charts is explained.

The major part of the course is devoted to practice in the analysis and solution of case problems. The laboratory method is followed. Working in groups the members of the class make a manufacturing analysis for a specific product, determining the equipment needed, and then prepare templates and drawings to exact scale to develop the most satisfactory layout. Students may present problems arising in their regular work to be assigned for group study if suitable.

The course is intended primarily for persons engaged in planning factory layouts or in related work such as motion and time study, operation study, and routing or who are preparing for that type of work. To benefit from the course a student should have had a reasonable amount of training and experience in the field of factory management.

358. Cost Control.

The course covers the following topics: Costs and their basic tie-up with accounting; the importance of cost in managerial control, budgeting, and estimating; the use of standby and variable costs in cost control and cost distribution; the importance of cost in breakeven points.

Prerequisite: A college-level course in Cost Accounting or the equivalent and preferably courses in Factory Management and Motion and Time Study.

351. Personnel Management.

Some of the principal purposes of personnel management are to develop cooperative and fair-minded relations between the employees, supervisors, and executives, raise the morale of the organization, and increase efficiency. Methods used to achieve these purposes are discussed in this course.

The topics covered are: Place of personnel work in the organization; recruiting employees; interviewing the applicant; some employment forms and records; occupational descriptions; testing the applicant; introducing and following up the new employee; stimulating interest in work; training and education; promotion and transfer policies; merit (efficiency) rating; adjusting grievances.

357a. Industrial Supervision.

By means of lectures and group discussions, sound and effective principles of industrial supervision are covered, including: Employee selection; employee placement and promotion; job training; stimulating the worker's interest in his job; handling complaints and grievances; maintaining discipline; improving

plant morale; reducing tardiness; absenteeism; cutting down unnecessary labor turnover; control of quality; department budgeting; increasing supervisory effectiveness.

357b. Industrial Supervision (Advanced).

Through a combination of lectures and group discussion, overall plant supervision is covered, including: Plant organization; wage payment policies; job evaluation; production planning, quality control; departmental budgeting; building and maintaining employee morale; industrial psychology; handling grievances.

363. Wage and Salary Administration.

The subjects covered include: The general economic picture; job evaluation; merit rating and employee evaluation; standards and incentives, financial and nonfinancial; seniority increases; bonuses and profit sharing; fringe benefits; the effect of community and competitive industry price levels; union attitudes and demands, wage and salary reports, and executive controls.

Problems arising from the determination of the desired type of salary and wage ranges and standard, general job classifications are analyzed. Specific types of wage plans are considered. Special emphasis is given to the constant need for maintenance and review of the entire program.

354. Office Management.

This course is intended to provide training in office organization and methods for those who are responsible for planning the supervision of office work and for those who are preparing for positions in that field.

The following topics are studied: Organization for office management; physical factors in office planning; office layout; office equipment and appliances; the filing department; the stenographic department; office management in the order department, as well as in the sales, advertising, purchasing, and credit departments; the office manual; design and preparation of office forms; control of accuracy and flow of office work; office costs and budgets; and personnel selection, classification, rating, and supervision. The classroom work is augmented by lectures given by experts in the fields of filing, dictation and transcription, lighting and personnel.

355. Office Personnel Supervision.

This course is intended for office supervisors who wish to improve their effectiveness in directing the work of others and for individuals who are preparing themselves to hold supervisory positions. Among the subjects considered are: The several types of business organization structure and the position and duties of the supervisor under each type; tested methods which have helped experienced office supervisors in 1) analyz-

ing and meeting supervisory problems, 2) improving employee effectiveness through training, 3) handling employee relations problems, and 4) improving or simplifying work methods.

The lectures are supplemented by assigned problems in practical application of the principles involved to actual situations, by group participation, and by guided discussion of problems brought in by students.

356. Office Machines and Methods.

Modern methods of business recording and their practical applications under present-day conditions are studied in this course. Methods applied to sales orders and shipments, receivables and collections, purchases and payables, inventories, cost records, timekeeping and pay rolls, and budgetary control are discussed.

Applications of the following types of machines and equipment are described: Calculating, listing, billing, posting and proof, addressing, duplicating, tabulating, and sorting. The class will visit several machine sales offices for demonstrations of representative mechanical devices and their application.

A knowledge of the fundamental principles of accounting is desirable as a background for the course.

362. Industrial Purchasing.

The purpose of this course is to present a clear picture of purchasing functions: Departmental organization; when, what, where, and how to purchase; purchasing department ethics and its relationship to other departments within an organization; and how to organize and maintain proper and efficient departmental records and reports.

378. Industrial Health and Safety.

An introduction to the course discusses the rise of the present factory system and its implications in the areas of health and safety. The main subjects included in this course are: The causes of injuries: carelessness, poor training, lack of safety devices, accident proneness; the causes of sickness: unpleasant working conditions, fatigue; techniques for reducing accidents: training, guards and other safety devices, safety campaigns and contests; and techniques for reducing sickness and poor health: physical examinations, medical services, proper training, good working conditions, proper rest periods. Other phases of the subject include: The responsibilities for good health and safety programs; the work of the Industrial Commission; the cost of the programs; and the results. Practical illustrations are taken from industry.

380. Industrial Psychology.

Basic industrial psychology is presented including the subjects of motivation, understanding people, individual differences,

learning, and attitude and idea development. Emphasis is given to morale, which is affected by monotony, fatigue, injury, sickness, indoctrination, training, grievances, and job security. Other subjects covered include communications and selection and placement procedures such as interviewing, testing, and counselling.

382. Contract Negotiations and Labor Legislation.

After a review of the background history of industrial development, labor union development, and the role of government, the following subjects are discussed: The important legislation today which affects labor-management relations; management objectives; union objectives; worker objectives; collective bargaining techniques; subjects for collective bargaining; an analysis of the position of the government; an interpretation of the union contract; the media for getting facts to the employees and the public; and proposed labor legislation. Important court decisions concerning the above subjects and others pertaining to labor-management relations are analyzed.

384. Industrial Quality Control.

The necessity for quality control and its place in the industrial organization are discussed. Various inspection methods such as acceptance inspection and control inspection are studied along with an evaluation of sampling techniques. Special emphasis is given to statistical quality control, which is broken down into the following areas: The need for scientific quality control; the principles of frequency distribution analysis; average and range charts; control charts for attributes; and an evaluation of the results and advantages of statistical quality control.

The relationship of quality control to incentives is studied along with techniques for making workers quality conscious.

386. Work Simplification.

This course deals with the need for and possibilities of simplifying the manner in which jobs are done. It stresses the basic idea of reducing the time and effort required to do the job without creating unemployment. It explains who can best simplify the job, how it can best be done, and what the results will be.

The tools of simplification—flow process charts, basic elements of motion (therbligs), micromotion, machine and plant layout—as well as their relationship to cost of production, utilization of production capacity, and safety are discussed. Specific examples of jobs are taken from industry and an opportunity for practicing the techniques is presented.

388. Supervisory Training Methods and Materials.

This course is concerned with in-plant as well as outside

training for foremen and supervisors. The internal training deals with: Regular supervisory meetings; conferences on human relations, personnel techniques, management techniques, conference leadership, and public speaking; and letters, various types of publications, and other media.

Techniques such as lectures, discussion sessions, the use of visual aids, role playing, the use of audio aids (recorded case studies), and conferences conducted by the supervisors themselves are evaluated.

The course also includes a study of other training opportunities at colleges, conventions, institutes, and vocational schools and of individual training through outside reading and studying.

390. Industrial Statistics.

This course deals with the elementary theory and technique of statistical methods, with application to typical production, quality, personnel, distribution, accounting, and general administration problems of business organizations. Statistical methods especially adaptable to industrial problems are stressed.

392. Problems of Security.

A background of the early development and industrial growth of our country with an accompanying rise in our standard of living is presented. A comparison is made between the United States and other countries regarding such factors as: Standard of living; form of government; freedom for the individual; opportunities; and the security of the individual. The discussion includes specific subjects such as: Old age benefits; social security; insurance and health; unemployment compensation; pensions; retirement; and profits, their amount and distribution. An analysis is made of: Idea and attitude development; communications; job security and worker satisfaction; and union philosophies. The discussion also includes an appraisal of current topics dealing with the welfare state and free enterprise.

The aim of the course is to study the problem of achieving the proper balance between security and freedom.

394. The Art and Science of Executive Management.

This course is for executives, such as administrators and managers. Two principal areas are considered: The personal qualifications of executives and the techniques used by executives. Under the former is a study of personal characteristics and the understanding of individual behavior and individual differences, group action, and how people learn. Techniques considered under the latter include organization problems and communication, training, wage and salary administration, research, employment and testing, safety and health, and matters of principles and policies.

312. Property Management. (See page 40.)

(For courses in Traffic Management, see page 45.)

MARKETING AND SALES MANAGEMENT

500a. Salesmanship.

The subject matter of this course is divided into three parts: First, the preliminary training which should be given anyone before he is sent out to make calls; second, the actual type of training necessary in getting the interview, arousing interest, handling objections, and getting the order; and third, a study of sales management, its relation to salesmanship, and of what is necessary in the developing of a sales personality. Present-day conditions which affect selling are discussed at each meeting.

501. Marketing Practice.

The sales strategy and the trade channels used in distributing consumer goods from the manufacturer to the final user are discussed in this course. The marketing of agricultural products is not included, and the marketing of industrial machinery, equipment, supplies, and raw materials is treated very briefly.

Among the topics covered are: The characteristics, strength, weaknesses, and special problems of independent stores, department stores, corporate chains, voluntary chains, mail-order houses, house-to-house selling, and consumers' cooperatives; the services and limitations of wholesalers and functional middlemen; choosing a method of distribution; selective selling; price policies; the Robinson-Patman Act; price control and the "fair-trade acts"; buying and turnover; expenses, profits, and losses in marketing; and ways of reducing marketing costs.

The course is particularly helpful to those engaged in sales, advertising, and credit work.

515. Industrial Marketing.

The objective of this course is to present not only an overall picture of the marketing field but also a practical study of the manner in which marketing is carried on by manufacturers.

Practical consideration is given to policy formation and to the business and marketing organization needed to accomplish the marketing function.

Prerequisite: A basic course in marketing or consent of the instructor.

518. Principles of Wholesaling.

This course should be of interest to those who are actively engaged in some phase of wholesaling or to those who are planning to enter some phase of the wholesale channels of

distribution. Some of the topics covered are: History and background of wholesaling; modern aspects of wholesaling; governmental regulations affecting the wholesale trade; various types of wholesaling; and operation and management of a wholesale business. Emphasis is placed on certain fundamental phases of a wholesale business such as location, organization, buying, receiving, warehousing, pricing, stock turnover and control, and the wholesaler's function in selling the products of industry.

Current examples are drawn from the grocery, drug, hardware, appliance, electrical, industrial, and clothing channels of distribution.

527. Sales Management.

The basic principles and the modern techniques of managing a sales department are stressed in this course.

The topics covered include: The task of the sales manager today; organization of the sales department; the selection of salesmen; training salesmen; compensating salesmen; equipment and manuals for salesmen; sales planning and forecasting; mapping sales territories; setting sales quotas; conducting sales conferences and conventions; sales contests; supervising salesmen; sales analysis; developing sound sales policies; and controlling sales costs.

Prerequisite: A course in salesmanship or practical experience in selling.

534. Market Research and Sales Analysis.

This course is designed to give the student a fundamental understanding of the role market research plays in business, the contributions it can make, and its limitations.

The basic techniques of market research and analysis are treated from a "how-to-do-it" standpoint. Frequent analyses of case studies are employed to highlight these techniques and to illustrate the problems in practical application. Techniques with regard to analyzing the problem, planning the procedure of the study, questionnaire development, sampling methods, interpretation of results, and the extension of research service are covered in that order. Although primary emphasis throughout the course is on qualitative analysis, the place of quantitative analysis in business operations is outlined and discussed.

In recognition of the rapid growth of scientific methods in marketing, this course has as its objective the development of scientific thinking with regard to marketing problems.

PUBLIC RELATIONS

540. Public Relations.

A general view of public relations techniques is presented, with emphasis on the broad principles of the profession and on the various media of public relations. This course is based on

methods now being used by business, institutions, and public agencies. Campaigns and material prepared by public relations firms and by the public relations departments of organizations are analyzed. Students are required to work out actual public relations problems.

Among the topics covered are: The functions of public relations; the roots of public relations — propaganda, past and present; who is "the public"?; correlating public relations with general policy and with advertising, publicity, and personnel relations; public relations in business, industry, government, institutions, labor unions; public opinion; the psychology of public relations; media for public relations — newspapers, magazines, special publications, radio, television, films, schools, groups, public gatherings, public projects; personal appearances; creating news; the ethics of public relations.

REAL ESTATE

The program of real estate education is sponsored by the Milwaukee Real Estate Board and endorsed by the National Association of Real Estate Boards.

306. Fundamentals of Real Estate Practice.

This is the first course of the program of real estate education sponsored by the Milwaukee Real Estate Board and endorsed by the National Association of Real Estate Boards. The subject matter deals with the fundamentals such as the nature of real estate, neighborhood and city growth, principle of land utilization, an outline of real estate valuation, functions of management, and the operations of real estate brokers. Also included in the discussions are brief outlines of the real estate finance and mortgages and the effects of changing economics upon the real estate market.

308. Principles of Real Estate Law.

The course covers subjects of general interest to persons engaged in the real estate business, or allied fields, and undertakes an explanation of the nature of real property, doctrine of estates, fee simple absolute, life estates and estate for years, tenancies; estates subject to contingencies; equitable ownership, and trusts. Considerable emphasis is placed on co-ownership, especially the treatment of joint tenancy and tenancy in common. Estates arising from marriage, that is, dower, curtesy, and homestead rights, are covered. Some time is devoted to easements, restrictions, fixtures, improvements. Practical work is done in voluntary transfer inter vivos, treating especially the uniform, standard forms of the State of Wisconsin including deeds, land contracts, mortgages, satisfaction, and assignments. If time permits, attention is paid to dedication, adverse possession, tax sales and tax titles, priorities, and equitable liens.

309. Real Estate Financing.

An understanding of the subject of real estate financing, with

its many-sided angles, is essential to a well-rounded knowledge of the real estate field. The course will, therefore, appeal not only to the office staff of real estate and mortgage loan companies, but also to salesmen who appreciate the importance of the information it offers as an aid to closing more sales.

Among the topics discussed are: Legal aspects of mortgages, land contracts, trust deeds, and Wisconsin moratorium legislation; building and loan associations; the National Housing Act; real estate bonds; farm mortgages; private and insurance company financing.

310. Real Estate Appraisals.

Year Course

Appraising real estate is an observational science, and the function of the appraiser is to serve as a curb to unwise investments and to conserve the wealth of those he represents. Errors in appraising are not in the art but in the person practicing the art. Complete and thorough understanding, therefore, is of utmost importance to those dealing in real estate in all its branches.

This course covers the three basic approaches to value and the many related problems necessary to formulating a sound appraisal: The market approach, the cost approach, and the income approach. The three approaches are fundamental in all appraisal practice and particular stress is given to their application to all types of property.

311. Real Estate Selling.

Successful salesmanship in the field of real estate can be achieved only by careful preparation and study. It is essential that the salesman be able to sell the services of realtors, and especially of his own office. This course covers the following important subjects: The exclusive listing, the relationship of principal and agent, real estate terminology, analyzing properties and classification, and fundamentals of basic residential construction. Also discussed are such subjects as finding prospects, the successful approach, the types of question asked by prospects, and the personal qualifications necessary for salesmanship.

312a. Property Management.

The principles of real estate management are thoroughly covered in this practical course. The subjects covered are: What the property manager should know; architectural terms used in real estate management; code of ethics; schedule of management—fees for various types of real estate; analysis of current trends and probable future real estate trends; legal descriptions and their interpretations; market analysis and graphic trends; contracts in management; liabilities of agency management; combating depreciation and obsolescence; Workmen's Compensation, Unemployment Compensation, Federal

Unemployment Excise Tax, Withholding Tax, Social Security, Special Taxes; OPA regulations; insurance coverage required in real estate management; appraising for insurance purposes; residential, commercial and farm leasing—pitfalls in leasing and how to avoid them; fixtures and real property; how to purchase supplies; employer-employee relationship; tenant-landlord relationship; field inspection of apartment building for study.

312b. Property Management.

This course is a continuation of Property Management 312a. Among the subjects covered are the following: Types of boilers; improving operating efficiency; boiler compounds, their value and use; types of heating systems and their operation; stokers, oil burners, and their operation; draft controls and their function; fuel, its types and relative characteristics; plumbing and miscellaneous equipment; maintenance and costs, their relation to established reserves; when and how to decorate; landscaping; types of refrigeration, initial cost and operating efficiency; ordinances and laws affecting real estate; extermination (field trip); income analysis; fireproofing—fire extinguishers and sprinkler systems; real estate and personal property taxes; co-op apartments; rooming houses and hotels; credit and collections.

313. Land Economics.

A study is made of rural and urban land use and city growth. Among the topics discussed are: Population problems; use, waste, and conservation of natural resources, including agricultural land, water supply, and forests; legal and economic aspects of land utilization with emphasis on urban development, planning, housing, streets and transportation, blighted areas, and problems of municipal administration.

201. Examination of Titles to Real Property.

This course is designed for attorneys, but it is also recommended for persons in abstract companies and real estate firms, and for those doing general mortgage loan work. The course is practical and covers the examination of titles and the writing of title reports on farm, residential, and corporate commercial properties. The main part of the course deals with abstracts of title, but title insurance certificates and registered (Torrens) title certificates are also considered. Illustrative materials drawn from actual cases and examinations cover the following: Liens and incumbrances; defective deeds; plats, descriptions, restrictions, leases, and easements; court proceedings affecting titles; mortgages to corporations; deeds, notes, mortgages, and substantive forms used in examining titles.

RETAILING

349. Management of a Small Business.

(Retail and Service Establishments)

Intended primarily to meet the needs of veterans and others

who are planning to establish their own retail stores and service establishments, this course stresses the principles upon which every successful small business is built.

The topics discussed include: Opportunities and pitfalls in running your own business; choosing the form of business organization; initial financing of a small business; financial records; banking and financial problems; cash versus credit; granting credit and making collections; business risks and insurance; advertising and sales promotion; selling goods and services; stock turnover and stock control; setting retail prices; buying; meeting competition; preventing business failure; selecting a suitable location; leasing or buying a building; store layout and equipment; supervising and training employees.

525. Retail Advertising and Sales Promotion. (See page 22.)

526. Retail Store Management.

(Department and Specialty Stores.)

In this course the problems involved in the management of a retailing operation are studied. Emphasis is given to the problems of the independent retailer. Subjects covered include: Opportunities in retailing; skills required; selecting a location; financing, organizing, and arranging the store; retail store records; buying merchandise; merchandising essentials; store routine; employment and training; sales promotion; interior and window display; successful selling techniques; store protection; and the merchant and his community.

527. Buying for Retail Stores.

This course covers purchasing for various sizes of organizations, purchase orders, contracts and forms, accounting procedures used in purchasing, purchasing for especial event and seasonal trends, and legal aspects of purchasing.

529. Fashion Merchandising.

This course consists of lectures and discussions surveying the major fields of fashion merchandising in women's apparel and accessories. Some attention is given to men's wear and to home furnishings. Students will follow a fashion season from market openings to final clearances in retail stores. Topics include: Modern retail merchandising; buying ready-to-wear; fashion promotion; selling fashion merchandise; the story of fashion; fabrics; color and design; manufacturing fashion merchandise.

532. Retail Mathematics and Control.

This course covers the mathematics involved in the operations of a retail business. The approach is based upon the solving of the actual mathematical problems involved in the various buying and merchandising operations. Included are problems covering the following: Review of mathematics; preparation for buying; markups; discounts and datings; important mathe-

matics; inventories; turnover; the operating statement; the retail method of inventory; initial markup — maintained markup and gross margin; expenses; sales planning; stock planning; purchase planning; model stocks; departmental analysis.

SECRETARIAL TRAINING

714. Secretarial Training.

The course is planned to assist stenographers and clerical workers who desire to advance into secretarial work, and to give secretaries additional knowledge in handling varied executive duties.

Among the topics studied are: Personality; business correspondence; stenographic techniques; office machines and supplies; filing; meeting callers; telephone courtesy; reports; and minutes.

717a. Shorthand Speed Building.

Gregg shorthand theory is reviewed and the stenographer has an opportunity to increase dictation speed. The rate of dictation for this group is from 90 to 120 words per minute. The entire class time is devoted to shorthand writing; there is no typing. The course may be taken after 717b.

717b. Shorthand Speed Building.

This course is a continuation of 717a, with emphasis on theory review and dictation. But 717a is not necessarily a prerequisite. Course 717b may be taken before 717a at a time when 717a is not being given. The rate of dictation is from 100 to 120 words per minute.

718. Shorthand Speed Building.

Shorthand writers with a speed of 120 to 140 words per minute study short cuts and advanced phrases in this course to build their writing speed to a higher rate. There is no transcription in class. An opportunity is given to receive the Gregg Shorthand Speed Awards.

719. Shorthand Speed Building.

This is an advanced course for shorthand writers who have a writing speed of 140 to 175 words per minute. Reporting outlines of words and phrases are studied and used in the dictation of speeches, testimony, and congressional record material. Secretaries who report the minutes of corporation meetings and reporters who take hearings and testimonies will find this high-speed course helpful in gaining the required shorthand speed. There is an opportunity to receive the 160- and 175-word Shorthand Awards.

SPEECH

7. Public Speaking.*

2 Credits

This is a practical course designed to improve the individual's ability in everyday conversation and in more formal public speeches. Through frequent class speeches, the adult learns that speaking in public can be enjoyable. Individuals are given personal assistance in their efforts to put into practice the principles of speech composition and delivery. Voice recordings are made so that each class member may hear himself as others hear him and thereby improve his speaking.

Speech 7 may be taken in lieu of Speech 8 by those enrolled in Engineering. It is not open to freshmen in Letters and Science or to those who have earned more than one credit in Speech 1.

13. Advanced Public Speaking.*

2 credits.

This course is a continuation of Speech 7. The aims of this course are to provide the individual with additional practice in the preparation and delivery of speeches. Because attention is directed toward problems and methods of group discussion, parliamentary law, and special occasional speeches, the speaker learns to handle these more complex speech situations with greater ease.

Prerequisite: Two credits in Speech 1, or Speech 7, or consent of the instructor.

708. Persuasive Speaking.

The business executive, professional person, salesman, or anyone dealing with people, who desires to develop his skill beyond the standard required for reasonable success in private and public speaking, will find this course beneficial.

Considerations of a speaker's personality, finding and organizing material, and understanding how to adapt ideas to the hearer, help the speaker to gain a firmer grasp of the art of selling himself and his ideas through speech. Lab. fee for voice recording, \$1.00.

Prerequisite: Speech 7 and 13, or consent of the instructor.

710. Radio Speaking.

This is a practical course designed to give the student a maximum amount of microphone speaking and studio experience. Every student has an opportunity to study and practice radio announcing, studio directing, script-writing, and script-reading. Original programs are prepared, rehearsed, and broadcast. Each student makes voice recordings, which become his property. Lab. fee, \$1.00.

* May be taken for credit by properly qualified students.

714. Voice Improvement.

In this course a study of the basic aspects of vocal production is followed by a study of the production and use of speech sounds. Drills and exercises are used to improve the voice. Each student makes voice recordings to check his progress. Lab. fee, \$1.00.

Prerequisite: Consent of the instructor.

STATISTICS

406. Business Statistics.

This course deals with the elementary theory and technique of statistical methods, with application to typical production, distribution, accounting and general administration problems of business organizations. Statistical methods especially adaptable to market research are stressed.

TRAFFIC MANAGEMENT

352a. Introductory Traffic Management.

This is a basic course in the fundamental principles of shipper traffic management. A study is made of the development of the American Transportation System; the facilities and instrumentalities of transport agencies; the nomenclature of traffic and transportation industry; carrier organizations and functions in relation to patrons; procedural methods for the procurement of transportation services; mechanics incidental to the preparation of freight for shipment; factors in the selection of a transportation service; characteristics of transport agencies; traffic geography; federal control and legal aspects of freight classifications, rates, charges, rules, regulations, practices, and services of carriers subject to the Interstate Commerce Act; major freight classification committees and territories; major rate territories and rate-making jurisdictions; rights of shippers and duties of carriers as defined in lawful tariffs; accessorial and special freight services a shipper may demand and carrier will perform subject to conditions and terms of the legal tariff; and the functions of a shipper traffic department.

352b. Freight Rates and Tariff Interpretation.

The subject matter of this course deals with the applicational, constructional, and legal aspects of freight classifications and freight tariffs of carriers subject to the Interstate Commerce Act. The topics covered are: Statutory requirements; methods in finding applicable tariff; analysis of Interstate Commerce Commission Tariff Circulars governing the publication of freight tariffs; analysis of the rules of the freight classifications; fundamental rules and principles for the interpretation of the provisions of freight classification and freight tariffs;

practical problems in reading and understanding tariffs; summary of the major freight rate structures and rate-making processes; and current developments in rate and tariff matters.

Prerequisite: Course 352a or the equivalent.

353. Rate-Making Principles.

This is an advanced course in freight rates and freight tariffs of carriers subject to the Interstate Commerce Act with particular emphasis on the theory and principles of rate-making. Consideration is given to the following: Analysis of the principal factors in freight classification making and freight rate-making; economic aspect of rate-making; legal aspect of rate-making; methods in testing the reasonableness of a rate; legal obligation of carriers to initiate rates; trade and market practices in rate-making; Interstate Commerce Commission jurisdiction in rate-making; and public interest in rate-making.

Prerequisite: Course 352b or the equivalent.

354. I.C.C. Procedures.

This is a basic course in the methods and remedial procedures before the Interstate Commerce Commission in matters relating to rates and practices of carriers subject to the Interstate Commerce Act. Analyses are made of the Interstate Commerce Act in relation to rights of shippers and duties of carriers in matters of rates, rules, regulations, and practices; the Interstate Commerce Commission Rules of Practice and application thereof to particular complaints; reports, decisions, and rulings of the Interstate Commerce Commission and federal courts prescribing procedural rules and practice.

Prerequisite: Course 353 or the equivalent.

ENGINEERING, TECHNICAL, AND INDUSTRIAL SUBJECTS

The following subjects required of all freshmen in engineering are offered in the evening classes:

Drawing

English

Mathematics

A student must have twenty-six grade points and at least twenty-six credits before he may be classified as a sophomore.

Bulletins with outlines of the various courses of study are available in the Registrar's office.

The non-credit courses in engineering, technical, and industrial subjects have been carefully planned to meet the particular educational needs of men and women employed in industry.

DESCRIPTION OF COURSES

Courses marked with an asterisk (*) carry credit toward a University degree for properly qualified students. For further information concerning registration for credit, see page 56.

ARCHITECTURE

1a. Architectural Drafting.

No credit.

The methods of drawing plans, scale drawings, and details as carried out in actual practice in an architect's office are followed in this course.

Class work consists of drawing details of check rail and casement windows; door frames in various types of wall construction; scale drawings and full-sized details of interior and exterior trim; studies of brick joints and bonds; schedules of materials; abbreviations and symbols used in architectural practice. Stair and fireplace design is thoroughly explained and detail drawings made. Lettering is stressed throughout the course.

Prerequisite: One semester of college engineering drawing or the equivalent in practical work.

1b. Architectural Drafting.

No credit.

This is a continuation of the first course in architectural drafting. Special attention is given to the proper proportion in design and in presentation by means of drawings. Elements of design are considered, including stairs, general details, plan

figuring and reading, plumbing, radiation, and heating layouts for hot water, steam, and vapor. The course takes the student through the design of a specified residence from the start.

Prerequisite: Course 1a or its equivalent.

CHEMISTRY

2a. General Chemistry.*

4 credits.

Note: This course in chemistry may be taken by all students in engineering except chemical engineers.

The course in general inorganic chemistry begins with the study of non-metals and of the fundamental principles of chemistry.

The topics covered are: Common elements; oxygen; water hydrochloric acid; chlorine, chemical theories and laws; chemical equations and calculations; ozone; hydrogen peroxide; the halogens; acids; bases; salts; the atmosphere; ammonia and other nitrogen compounds; nitric acid; sulphur and sulphuric acid; carbon and carbon compounds; hydrocarbons and their derivatives.

In the laboratory, the important non-metals are studied. Attention is given to bleaching agents; common acids of commercial value; ammonia and other common bases; neutralization; purification of water; fuel gases and important by-products of coal gas.

2b. General Chemistry and Qualitative Analysis.*

4 credits.

A study is made of the inorganic chemistry and qualitative analysis of the common elements. Special emphasis is given to the principles underlying the analytical procedures.

Prerequisite: Chemistry 1a or 2a.

CIVIL ENGINEERING

21 Engineering Curves.*

2 credits.

Ordinary circular curves, compound curves, and transition spirals, as used in engineering design and construction, are studied with a view to understanding their uses, the method of laying them out in the field, and the calculation of data for laying them out in the field. The course is intended primarily for civil engineers but can be of value to other engineers and surveyors since the subject is covered much more fully than is possible in the usual undergraduate surveying course. Computation methods are stressed.

Prerequisites: For university credit, trigonometry and C. E. 12. For others a working knowledge of trigonometry and elementary surveying.

22. Theory of Route Surveying.*

3 credits.

Fundamental principles involved in the selection of routes for engineering structures such as railways, highways, and

similar works are studied. Consideration is also given to related field and office methods, including calculation of earthwork, balancing of quantities, vertical curves, and related topics. There is no field practice in this course.

Prerequisites: For university credit, C. E. 21; for others a working knowledge of trigonometry, elementary surveying, and calculation of simple circular curves.

DRAWING

12. Engineering Drawing.* 3 credits. **(formerly Engineering Drawing 1)**

This course is designed for those with little or no experience. It begins with the fundamental theory of orthographic projection, which is explained by lectures and developed by means of reading problems, freehand sketching, and mechanical drawings. The proper use of instruments is demonstrated. The theory and practice of elementary dimensioning, pictorial (three-dimensional) drawing and sectional views are thoroughly dealt with by lectures and problems. Freehand lettering in pencil and ink is practiced throughout the semester. Standard conventions and conventional methods of drawing various screw threads, fasteners and springs round out the course.

All problems consist of actual machine parts. American Standards Association practice is followed throughout the course.

There is no prerequisite.

23. Engineering Drawing and Descriptive Geometry.* 3 credits.

This is a continuation of the work in Course 12. It begins with a survey of accurate dimensioning systems such as center-line, finished-surface, and base-line, which involve practice in the computation of limits for the various classes of standard fits. This work is followed by making an assembly drawing from detail drawings, which will require screw threads, fasteners, springs, and other items dealt with in the previous course. The remainder of the semester is devoted to descriptive geometry, which is the basic theory underlying all projection drawing. It deals with auxiliary views, revolution of lines and planes, line and plane relationships, curved lines and surfaces, plane sections and developments of curved surfaces, and some problems involving practical application of principles.

Prerequisite: Drawing 12 or equivalent in commercial drafting experience as evidenced by submission of satisfactory drawings and passing of a written test.

24. Advanced Engineering Drawing.* 2 credits.

This is a required course for mechanical engineering students; others are not eligible for credit but may take the course. It covers advanced dimensioning, multiple threads, various

types of power threads, forging drawings, welding drawings, engineering charts and graphs, sketching and dimensioning machine parts, constructing an assembly from them, and drawing detail parts from a design layout.

Prerequisite: Drawing 23.

(Courses 12 and 23 may be elected for credit by students in the College of Letters and Science.)

ELECTRICAL ENGINEERING

6c. Industrial Electronics. 4 hours.

No credit.

The following subjects are covered: Properties of tuned circuits; series and parallel resonance; analysis of oscillator circuits; inductance-capacitance tuned oscillators; conditions for maintenance of oscillations; parasitic oscillations; negative resistance and negative transconductance oscillators; beat frequency oscillators; resistance capacitance tuned oscillators; phase shift oscillators; relaxation oscillators, trigger circuits; multivibrators; gaseous tubes and their characteristics; control circuits for gaseous tubes.

Occasional laboratory work is included to demonstrate the subject matter.

Prerequisite: Industrial Electronics 6b.

6d. Industrial Electronics. 2 hours.

No credit.

The following subjects are covered: Photo-emission; different types of photo-cells; rating of photo-tubes; vacuum type and gas type photo-cells; optical systems for photo-tubes; filters for photo-tubes; amplifier circuits for photo-electric cells; cathode ray tubes; interpretation of patterns on cathode ray tubes; beam deflection systems; sweep circuits for cathode ray oscilloscopes; amplifiers for use with cathode ray tubes; characteristics of screen materials; photography of traces; recording of non-electrical quantities; transducers.

Occasional laboratory work is included to demonstrate the subject matter.

Prerequisite: Industrial Electronics 6c.

MATHEMATICS

All courses offered by the Department of Mathematics require **mathematical preparation** consisting of a minimum of one unit of algebra and one unit of plane geometry.

OM. Review of Algebra.

No credit.

This course meets five hours a week for seven weeks, and consists of a review of factoring, fractions, exponents and radicals, and quadratic equations.

OM-2M. College Algebra.* OM—No Credit. 2M—3 credits.

This course is designed for those people who have had one and one-half years of high-school algebra but because of being away from the subject need extensive review.

The material covered is that outlined in OM and the algebra part of 51.

51. Elementary Mathematical Analysis.* 5 credits.
.(Algebra and Trigonometry)

There is a very brief review of factoring, fractions, exponents and radicals followed by an examination on these topics. Those who pass the examination may continue the course, which includes the following topics: Functions and graphing; linear and quadratic equations; polynomials of higher degree; systems of equations; determinants; binomial formula; logarithms; progressions; permutations; combinations; probability; and both the analytic and computational parts of plane trigonometry with emphasis on the analytic part.

Prerequisites: One and one-half years of high-school algebra and one year of plane geometry. An entrance examination in algebra will be given at the second meeting of the class and those who fail must take OM or OM—2M.

52. Elementary Mathematical Analysis.* 5 credits.
(Analytic Geometry)

The topics studied include: The straight line, circle, ellipse, parabola, hyperbola, trigonometric and exponential curves, all studied both in rectangular and polar coordinates. In addition the following topics are considered: Trigonometric equations, inverse trigonometric functions; complex numbers; parametric equations; curve fitting; use of logarithmic and semi-logarithmic graph paper; and an introduction to analytic geometry of three dimensions.

Prerequisites: Mathematics 51 or three and one-half years of high-school mathematics including two years of algebra, trigonometry, and one year of plane geometry.

102a. Calculus.* 4 credits.

This course covers the following subjects: The derivative, its meaning and application; limits; the power function; differentiation of algebraic functions; second derivative applications; infinitesimals; definite integrals; circular functions; inverse circular functions; exponential and logarithmic functions; maxima and minima; integration.

Prerequisite: Analytic Geometry.

102b. Calculus.* 4 credits.

Course 102b is required of all sophomore engineers and is a continuation of Mathematics 102a. Content of course: Advanced

integration; successive integration; center of gravity; moment of inertia; curvature; series; total derivatives; and exact differentials.

Prerequisite: Mathematics 102a or the equivalent.

110. Higher Mathematics for Engineers.* 3 credits.

The topics discussed in this course include the differentiation of functions of many variables and various applications of these derivatives; line, surface, and multiple integrals and their applications; and an introduction to vector analysis.

Prerequisite: A year of calculus.

111. Higher Mathematics for Engineers.* 3 credits.

This course consists of a study of ordinary and partial differential equations, Fourier series with applications to the solution of partial differential equations.

Prerequisite: A year of calculus.

116a. Higher Analysis.* (Complex Variables). 3 credits.

This course is an introduction to the theory of functions of a complex variable, a subject of fundamental importance not only for pure mathematics, but also for such applied fields as aeronautics and electrical engineering. The course includes a geometrical treatment of complex numbers and of the operations with complex numbers; the definition of e^z , $\log z$, $\sin z$, etc. when z is a complex variable; the definition and properties of analytic functions such as conformal mapping, the Cauchy Integral Formula, Taylor Series, and Calculus of Residues.

Prerequisite: A course in advanced calculus or consent of the instructor.

116b. Higher Analysis.* (Partial Differential Equations). 3 credits.

This course provides an introduction to the study of the partial differential equations of mathematical physics. The solutions are obtained as expansions in Fourier series, in series of Bessel's Functions, or in series of Legendre polynomials. The theory is applied to various boundary value problems arising in the study of mechanical vibrations, heat conduction and electrical potentials.

Prerequisite: A course in differential equations.

MECHANICAL ENGINEERING

41. Mechanism.* 6 hours. 3 credits.

This is one of the fundamental courses in mechanical engineering. It is a prerequisite for all other design courses. It

correlates theory with practice and develops a sense of judgment, which is vital in all engineering. Included are accurate graphical methods of laying out relative motions of machine parts by instantaneous centers, such as various types of linkage, cams, toothed gearing, ratchet devices, velocity and acceleration ratios, and their applications in various machines.

Prerequisite: One year of college engineering drawing or the equivalent in commercial experience.

223a. Heating, Ventilating, and Air Conditioning. 3 hours. No credit.

This course is offered for those actually engaged in the industry and for those who desire a practical knowledge which will help them plan, estimate, and install heating, ventilating, or air conditioning systems. Current practices are discussed by instructors who have actually used them in the field. In both Courses 223a and 223b a study is made of the fundamentals pertaining to the design covered, equipment selection and utilization, use of tabular and chart data, and field problems. At intervals experts in a particular branch of the industry are invited to review their specialty and to outline present-day field practice. Refrigeration principles and equipment insofar as they pertain to summer air conditioning are discussed.

Prerequisites: A knowledge of arithmetic and the ability to use simple formulas.

223b. Heating, Ventilating, and Air Conditioning. 3 hours. No credit.

This is a continuation of the course offered the first semester. Although preferable, it is not necessary for the student to have taken 223a.

231. Smoke Control, Fuels and Combustion. 2 hours. No credit.

This course offers instruction in the fundamental principles and practices of burning coal and other fuels effectively, efficiently, and smokelessly in industrial furnaces, as well as in domestic plants. Special attention is paid to methods of smoke and fly-ash control. Topics covered include: Discussion of the fuel situation and fuel uses; composition, characteristics, and properties of fuels; analyses of fuels; combustion; chimney and draft; methods of hand firing; mechanical stokers; powdered fuel; liquid and gaseous fuels; industrial and domestic furnace settings; boilers; principles and methods of and equipment for smoke and fly-ash control.

250. Materials and Processes. 2 hours. No credit.

This course should be of considerable value to men interested in the engineering and design of manufactured products. It consists of a study of the materials and processes used in manufacturing and the selection of materials which fit those processes

most satisfactorily. Topics include ferrous and non-ferrous metals and alloys; mechanical, magnetic, and electrical properties of materials; heat treatment; electrical insulation; plastics and their molding; powder metallurgy; casting, hot and cold working, welding, and allied processes; machining, gaging, inspection and quality control; and the cleaning, plating, and finishing of metal products.

285. Oil Hydraulic Power and Its Industrial Applications.

2 hours. No credit.

This course covers the theory, development, and practical applications of oil hydraulics. Under theory and development are included behavior of oil under pressure, its flow characteristics, viscosity, and behavior in hydraulic machinery. The practical applications include generation, transmission, and control of oil hydraulic power as well as its utilization and general and industrial application. This course should prove useful to those engaged in the design and manufacture of oil hydraulic equipment and to the present and potential users of this means of power transmission.

Prerequisite: A knowledge of elementary physics.

292. Die Engineering Layouts and Formulas. 2 hours. No credit.

The course covers the following topics: Types of blanking dies; progressive dies; bending and forming dies; "cut-and-carry" progressive dies; laying out dies in consecutive order; perforating and piercing; methods of feeding; drawing shells; calculating shell blank sizes; hydrostatic dies; forging, coining, swaging, extruding; miscellaneous pressroom equipment and materials; tables; and charts.

Prerequisites: Four years of high-school mechanical drawing and one semester of trigonometry or the equivalent.

296. Tool Design. 3 hours.

No credit.

This course is a survey of production tooling. The units of work studied are: Operation and machine tool layout sheets; tool cost sheets; jigs and fixtures; gages; punch and dies; small cutting tools. The study of the practical application of these units of work is accomplished by assigning existing problems in industry on partly completed blue line prints.

Prerequisite: Four semesters of high-school drawing or the equivalent.

210. Patents and the United States Patent System. (See page 25.)

MECHANICS

1. Statics.* 3 hours.

3 credits.

Prerequisite: Physics 51 or equivalent.

2. Dynamics.* 3 hours. 3 credits.

Prerequisite: Mechanics 1; Mathematics 102b or concurrent registration.

106. Advanced Mechanics of Materials.* 3 hours. 3 credits.

Some topics (curved beams, flat plates, elastic foundations, etc.) and analyses not included in Mechanics 3 are covered.

Prerequisites: Mechanics 2 and 3.

107. Mechanical Vibrations.* 3 hours. 3 credits.

This course deals with general theory; vibration instruments; absorbers; stabilizers; critical speeds; balancing.

Prerequisite: Mechanics 2.

METALLURGY

122. Principles of Metallurgy.* 3 hours. 3 credits.

This course consists of a study of the fundamental principles of metallurgical engineering.

124. Metallurgy of Iron and Steel.* 3 hours. 3 credits.

In this course the following subjects are covered: The reduction of iron ores and processes of steel making; control of operations; rolling mills and shaping; specifications.

Prerequisite: Chemistry 2b or consent of the instructor.

STRUCTURAL ENGINEERING

497a. Estimating for Builders. 2 hours. No credit.

The practical methods of estimating used by builders and contractors are taught in this course. Instruction is given in the reading of construction drawings (blueprints). Plans for small buildings are furnished, and a systematic estimate of all material and labor quantities is made. The estimator is taught how to make proper allowance for unavoidable waste in construction; how to analyze cost data for similar projects and arrive at unit costs; how to make the proper tabulations and calculations in order to arrive at the direct cost.

Prerequisites: High-school graduation or the equivalent and one year of high-school mathematics.

497b. Estimating for Builders. 2 hours. No credit.

The subject matter of this course is confined to reasonably large buildings of reinforced concrete, steel, and wood. The work of the semester is directed to the preparation of quantity surveys and to the estimate of the labor required for the different types of construction. A complete set of blueprints, together with the specifications of some large buildings in Milwaukee, is acquired by the student.

Prerequisite: Course 497a or its equivalent.

LETTERS AND SCIENCE

ADMISSION

An applicant who wishes to enter the University must fulfill the general requirements for admission as set forth in the Day Class bulletin. Applications for admission, which may be obtained from the Office of the Registrar, must be filed in advance of registration.

Applicants who have attended another college or university must submit to the Registrar complete credentials of both their high-school and college work in advance of registration.

No student will receive credit in these courses unless he has satisfied entrance requirements of the University and has had the necessary prerequisites. **The responsibility for complying with these rules rests with the student.** Adults who do not have the necessary entrance credits and prerequisites may be admitted to these credit classes, but they will not receive University credit.

The maximum credit allowed toward graduation for work done in the Extension Division including instruction in day classes, evening classes, and correspondence study may normally not exceed one-half of the number of credit hours required for graduation from any given course.

In some instances it is possible to earn up to 65 credits in the Milwaukee Extension classes. For information regarding exceptions to the above stated rule, consult the Registrar.

Bulletins with outlines of the various courses of study are available in the Office of the Registrar.

CLASSIFICATION OF STUDENTS

A student must have 25 grade-points and at least 25 credits before he may be classified as a sophomore; 58 grade-points and at least 58 credits before he may be classified as a junior.

DESCRIPTION OF COURSES

The courses marked with an asterisk (*) carry credit toward a University degree for properly qualified students.

The courses that are not marked with an asterisk (*) do not carry University credit but are included here for convenience.

ART EDUCATION

50a. Basic Drawing.* **3 credits.**

This is a course in art fundamentals and is prerequisite for all further art study. The student is given a thorough intro-

duction to perspective and its use in representation and pictorial composition. The work also covers pencil technique in the study of texture, light and shade, pattern, and form. Other graphic media used are charcoal, crayon, and pen and ink. Work is from still-life objects, architectural subjects, imagination, and the human figure.

Open to Letters and Science and Art Education freshmen.

50b. Basic Drawing.*

3 credits.

Course 50b continues the study of still-life composition in black and white and color. Work in color is limited mainly to pastel, with watercolor optional toward the end of the semester. There is further study of the human figure in various media. Emphasis is on mastery of media and creative expression.

Prerequisite: Art Education 50a.

61a. Elementary School Arts.*

3 credits.

A general survey is made of the field of arts crafts and its possibilities in the various grade levels. Drawing ability is NOT a prerequisite. This is a laboratory participation course that will equip the teacher with practical ideas for the classroom and will bolster his confidence in his ability to present an interesting art program.

The work of the course includes lecture, discussion, program planning, evaluation of children's work and participation in a variety of the basic materials of expression.

Prerequisite: Junior standing.

61b. Elementary School Arts: Crafts and Industrial Arts.*

3 credits.

This is a laboratory participation course which will fulfill the teacher's need for activity ideas that can be presented in her own grade level. Ability to draw is NOT a prerequisite. The work of the course includes lecture, discussion, program planning, evaluation of children's work, and participation in crafts activity such as paper mache; construction, stencilling, stick and block printing, simple weaving, primary construction, and puppetry.

Prerequisite: Junior standing and Creative Design 62.

7. Creative Design.

No credit.

The purpose of this course is to develop the creative and imaginative powers of the student through the invention of new forms of design. The course is primarily for students interested in the design of handicrafts, textiles, advertising display, and industrial products. Illustrated lectures deal with the following subjects: Modern or functional approach to design; design sources in nature; abstract pattern; form development with curved and straight lines; theory and application

of color. Experiments in creative design include: Analysis of design elements; line, form, color, material; the study of design principles—direction, balance, and rhythm.

(For other Courses in Art, see pages 76, 77, 79.)

ASTRONOMY

6. Navigation and Practical Astronomy.*

2 credits.

This is an elementary course on the essentials of air and sea navigation. It includes the following subjects: The use of charts, compass, and sextant; the determination of the rhumb line and great circle tracks between two given points; the determination of latitude, longitude and azimuth from observations of celestial objects.

Prerequisite: Trigonometry.

CHEMISTRY

1a. General Chemistry.*

5 credits.

Note: This course in chemistry may be taken by all students in Letters and Science except those in the Chemistry Course, which requires Course 4a.

The course in general inorganic chemistry begins with the study of non-metals and of the fundamental principles of chemistry.

The topics covered are: Common elements; oxygen; water; hydrochloric acid; chlorine, chemical theories and laws; chemical equations and calculations; ozone; hydrogen peroxide; the halogens; acids; bases; salts; the atmosphere; ammonia and other nitrogen compounds; nitric acid; sulphur and sulphuric acid; carbon and carbon compounds; hydrocarbons and their derivatives.

In the laboratory, the important non-metals are studied. Attention is given to bleaching agents; common acids of commercial value; ammonia and other common bases; neutralization; purification of water; fuel gases and important by-products of coal gas.

1b. General Chemistry and Qualitative Analysis.*

5 credits.

A study is made of the inorganic chemistry and qualitative analysis of the common elements. Special emphasis is given to the principles underlying the analytical procedures.

Prerequisite: Chemistry 1a or 2a.

ECONOMICS

1a. General Economics.*

4 credits.

The course is designed to acquaint the student with the basic characteristics of our modern economic organization. A brief introduction compares our present system with earlier

ones, showing how our industrial organization has developed. A study is made of the organization, management, and financial control of corporations and other types of business concerns. Large-scale enterprise, corporate securities, and industrial combinations are studied. Labor organization and policies and industrial conflict are examined. Other important subjects covered include money, credit, banking, speculation, insurance, international trade, foreign exchange, and transportation problems.

Prerequisite: Sophomore standing.

1b. General Economics.*

4 credits.

The first part of this course deals with the factors which determine wages, rent, interest, and profits in the business world. Following this comes a study of the causes and effects of business cycles and price changes. The personal distribution of wealth and income is also examined in detail. Attention is given to consumption and the factors affecting consumption and saving. Consideration is given to the problems in the field of public finance, such as taxation, public expenditures, public loans and debts, and to economic policies, such as laissez faire, governmental control, protective tariffs, free trade, and the control of industrial combinations.

Prerequisite: Economics 1a.

122. Labor Problems.*

3 credits.

This is a course concerned with the conduct of both union and non-union workers and their employers. The conflicts arising out of the buyer-seller relationship of efficiency-conscious managements and the job scarcity awareness of workers are studied as is also the organized labor union movement as a phase of "industrial citizenship" and "industrial government." Proposals for improving labor-management relationships are studied under the headings of collective bargaining agreements as the contribution of unionism; insurance plans; incentive wage plans, vacations with pay, employee stock ownership and profit sharing, etc., that make up the "Welfare Capitalism" suggestions of business managements; and the increasing role of government in both labor and social legislation and in intervention in labor-management disputes, as the basic proposition of many "intellectuals," agriculturalists, and businessmen for "solving" labor problems.

Prerequisite: Economics 1a.

EDUCATION, see page 73

ENGLISH

1a. Freshman English.*

3 credits.

Freshman English is required of all freshmen in all the colleges of the University. Its purpose is to give careful train-

ing in standard English speech and writing and to develop accuracy in thinking and skill in expression.

1b. Freshman English.*

3 credits.

English 1b is a continuation of English 1a. It is required of all freshmen excepting those who receive a grade of "A" in English 1a.

Prerequisite: English 1a.

INTRODUCTORY LITERATURE COURSES

Students may fulfill the B.A. and B.S. requirements of six credits in sophomore literature by taking two semesters of work from the courses 30, 32, 33, 40. To complete the sophomore requirement a student may offer any combination of semester courses with the exception that 30 and 33 may not be in any way combined.

30a. Survey of English Literature.*

3 credits.

Course 30a traces the historical development of English literature.

The selections assigned for reading and study are linked with lectures on the social and literary background from the beginning until modern times. The semester's work covers the period from Chaucer to Dryden.

Prerequisite: English 1b or a grade of "A" in English 1a.

30b. Survey of English Literature.*

3 credits.

This is the second semester of a year's course in the historical survey of English literature. It follows the same plan as 30a. The semester's work extends from Swift and Defoe up to nearly the present time.

Prerequisite: English 1b or grade of "A" in English 1a.

32a. Contemporary Literature.*

3 credits.

This course is designed to give the student such an introduction to the literature of the current century as will enable him to read with more understanding the poetry, drama, and fiction of the present.

Prerequisite: English 1b or a grade of "A" in English 1a.

32b. Contemporary Literature.*

3 credits.

This course continues the survey of contemporary literature begun in the first semester. The lectures and discussions cover the period from 1929 to the present time.

Prerequisite: English 1b or a grade of "A" in English 1a.

33a. Introduction to English Literature.*

3 credits.

Course 33a is intended for those who wish to increase their

appreciation and enjoyment of literature. It is a study of masterpieces in English literature from the sixteenth century to our own time.

Prerequisite: English 1b or a grade of "A" in English 1a.

33b. Introduction to English Literature.* 3 credits.

Course 33b continues the study of English literature begun in the first semester.

Prerequisite: English 1b or a grade of "A" in English 1a.

40a. American Literature.* 3 credits.

The aim of this course is to acquaint the student with representative literature produced in the United States from colonial times down to the present. In addition to tracing the main currents in American thought and culture, the lectures include biographical studies of the more important authors.

Prerequisite: English 1b or a grade of "A" in English 1a.

40b. American Literature.* 3 credits.

A significant and revealing approach to the experience of the American people may be made through American literature. The emphasis of the course is upon the relationship between American literature and American life. The ground covered is from the Civil War to the present time.

Prerequisite: English 1b or a grade of "A" in English 1a.

25 Vocabulary Building. No credit.

The lectures in this course cover many of the important studies which have been made about words, their relation to success, and the most approved methods of acquiring them. There will be class exercises based on the lecture material.

(For other courses in English, see *Journalism*, page 64, *Business*, page 23, and *Liberal Education*, page 76. For *Reading Efficiency*, see page 70.)

FRENCH, see page 64.

GEOGRAPHY

7. World Survey of Economic Geography.* 3 credits.

This course is a study of the geographic aspects of man's economic activities. It includes a survey of world patterns of population and settlement, types of agricultural land use, extractive industries, manufacturing, world trade, and transportation.

Open to freshmen. May not be taken by students with credit in Geography 6.

111. Geography of Middle America.*

2 or 3 credits.

The course in Middle America is primarily designed to give the student a regional view of Central America, Mexico, and Carribbean lands. The physical and cultural aspects of each region are fully discussed. The present economic, political and social problems as well as future trends are considered for all areas.

Prerequisite. Sophomore standing.

GERMAN, see page 65.

HISTORY

Open to Freshmen

Students who take History 3 cannot elect History 2; they may take History 5 for two credits a semester.

3a. European Civilization.* (800 to 1660.) 3 or 4 credits.#

This course is a survey of European development from the fall of Rome to the middle of the seventeenth century. The various aspects of medieval history are discussed, including the role of the church, economic, social, and political institutions, and the factors which contributed to the transition to modern times. The course proceeds from the medieval to the early modern period with emphasis on the economic and religious changes, the rising nation states, and the resulting international rivalries.

3b. European Civilization.* (1660 to the present.)

3 or 4 credits.#

Course 3b is a continuation of Course 3a. The point of departure is the development of eighteenth-century civilization, the mercantilistic empires, and the strains and stresses which led to the French Revolution. There follows a survey of the contributions to European political thought of the revolutionary period, the development of nationalism and nineteenth-century liberalism, the impact of industrialization upon European society, and the expansion of European civilization to include much of the world. The last third of the course is devoted to a consideration of the background of the two great world wars.

Prerequisite: History 3a or consent of the instructor.

5a. English and British History.*# #

2 or 3 credits.

A survey is made of English history from its beginning to

All students attend class four hours a week. Two research papers are required of those who sign up for four credits.

Upper-classmen may take this course for only two credits; others may take it for only two credits if they have had or are now taking another freshman history course at Wisconsin.

the death of Queen Elizabeth in 1603. Racial composition and the results of the Anglo-Saxon and Norman invasions receive attention. Considerable emphasis is given to tracing constitutional, economic, and social developments, and to the role of the church. The relations of England with other parts of the British Isles and with Europe are studied. The closing weeks are devoted to the Tudor period, which witnessed the coming of the English Reformation and the decline of the medieval economic system. This period culminated in the famous Elizabethan age.

5b. English and British History.*# # 2 or 3 credits.

A survey is made of English history from the accession of James I to the present. After tracing the conflict for supremacy between Parliament and King, and the ensuing rise of responsible government, the course gives attention to the economic revolution and to commercial and colonial expansion. The formation of Britain's Empire is studied, as well as imperial and foreign problems and policies. The closing weeks deal with Britain's role in the first World War, with the period between the two world wars, and with the factors that led to the conflict with Nazi Germany.

Prerequisite: History 5a or consent of the instructor.

Not open to Freshmen

4a. History of the United States.* 3 credits.

Course 4a traces American development from its colonial beginnings to the election of 1860. After a rapid survey of the colonial period, emphasis is placed on the establishment of the national government and the factors influencing its subsequent evolution. In following the growth of the new nation, attention is focused on the development of national feeling, economic and social life, western expansion and its relationship with the rise of the democratic spirit, and the appearance of sectional discord.

Prerequisite: Sophomore standing.

4b. History of the United States.* 3 credits.

Course 4b is a survey of the history of the United States from 1860 to the present. It opens with a study of the Civil War and Reconstruction periods and continues with the tracing of the transformation of the United States from a rural and agricultural to an urban and industrial society. Attention is given to the rise of "big business," agrarian unrest, the progressive movement, and the rise of organized labor. A significant theme is the emergence of the United States as a world power.

Upper-classmen may take this course for only two credits; others may take it for only two credits if they have had or are now taking another freshman history course at Wisconsin.

The closing weeks deal with America's involvement in the first World War, the postwar events, the New Deal program, and the role of the United States in the second World War.

Prerequisite: Sophomore standing.

JOURNALISM

16. Short Story Writing. No credit.

An introduction to the literature of short fiction, training in the writing of fiction, and some attention to publication are taken up in this course. Beginners in fiction writing are instructed in the finding and development of material and in the elements of fiction writing. Students who have had at least one story published receive instruction in the problems of marketing.

19. Commercial Journalism. No credit.

The object of the course is to start prospective writers on the road to sales.

The subjects include newspaper features, newspaper serials and short stories, trade journal articles, magazine articles, and short features.

Each member receives individual criticism and advice.

24. Fiction Workshop. No credit.

Students bring writing projects and problems for group discussion, investigate the requirements of various markets for fiction, and submit written lessons dealing with different types and aspects of fiction, including criticism of complete stories.

Prerequisite: Short Story Writing or consent of the instructor.

(For other courses, see English, page 59, and Business, page 23.)

LANGUAGES

French

1a. First-Semester French.* 4 credits

1b. Second-Semester French.* 4 credits.

Prerequisite: French 1a or one year of high-school French.

10a. Third-Semester French.* 3 credits.

Prerequisite: French 1b or two years of high-school French.

10b. Fourth-Semester French.* 3 credits.

Prerequisite: French 10a or three years of high-school French.

21a. Elementary Survey of French Literature.* 3 credits.

This course presents an elementary survey of the literature of France of the nineteenth century, with selected illustrative readings from the major periods, movements, and writers. This course is prerequisite to all advanced courses in French.

Prerequisite: French 10b or four years of high-school French.

21b. Elementary Survey of French Literature.* 3 credits.

This course presents an elementary survey of the literature of France of the seventeenth and eighteenth centuries. It is a continuation of French 21a.

Prerequisite: French 10b or four years of high-school French.

German

1a. First-Semester German.* 4 credits.

1b. Second-Semester German.* 4 credits.

Prerequisite: German 1a or one year of high-school German.

Polish

1a. First-Semester Polish.* 4 credits.

1b. Second-Semester Polish.* 4 credits.

Prerequisite: Polish 1a or one year of high-school Polish.

10a. Third-Semester Polish.* 3 credits.

Prerequisite: Polish 1b or two years of high-school Polish.

10b. Fourth-Semester Polish.* 3 credits.

Prerequisite: Polish 10a or three years of high-school Polish.

20a. Advanced Polish.* 2 credits.

Those who speak Polish with some degree of fluency and read the language with relative ease will find this course a useful brush-up of the fundamentals of Polish grammar. The work in the course consists of a final rapid topical review of grammar, with emphasis laid upon the theory and the "rules" that govern certain grammatical peculiarities of the Polish language. The reading includes the shorter prose fiction of Sienkiewicz, Reymont, and other outstanding masters. Original literary translations from the Polish into English are prepared for publication.

The course is especially recommended to teachers of Polish, present or prospective, as well as to those who may be interested in mastering Polish thoroughly for business, professional, or cultural reasons.

20b. Advanced Polish.* 2 credits.

This is a continuation of Course 20a. It is open to properly qualified new students.

70. Polish Civilization: The Arts.**1 credit.**

The cultural and intellectual as well as the institutional, economic, religious, and social history of Poland from 966 A.D. up to our time is surveyed in this course. The lectures, which are given in English, deal with the geopolitical relationship of Poland to the rest of Europe, and with the peoples of Poland: an ethnographic survey; the history of Poland from 966 to 1950; Polish literature; the Polish theater: 1918-1939; early and modern Polish art; and Polish music.

71. Polish Civilization: The Sciences.**1 credit.**

The lectures deal with the following subjects: The press before 1939; economic history; agriculture; industry; social welfare and social security; universities and research institutes; Poland's achievements in mathematics, astronomy, physics, radioactivity, chemistry, biology, medicine, aeronautics, engineering, and archaeology.

Russian**1a. First-Semester Russian.*****4 credits.****1b. Second-Semester Russian.*****4 credits.**

Prerequisite: Russian 1a.

10a. Third-Semester Russian.***3 credits.**

Prerequisite: Russian 1b.

10b. Fourth-Semester Russian.***3 credits.**

Prerequisite: Russian 10a.

20. Advanced Russian.* Yr.**2 credits each semester.**

Reading in annotated editions of Russian classics and conversational drill in everyday and colloquial Russian constitute the approach in this course. Points in grammar are touched upon and reviewed whenever necessary.

Prerequisite: Two years of college Russian or its equivalent or consent of the instructor.

50. Introduction to Russian.**No credit.**

This course is designed as an introduction to elementary Russian for those with no previous knowledge of the language. It familiarizes the student with the Russian sounds and script, provides considerable individual drill in reading and writing Russian via dictation and upon sight, and equips him with a minimum basic glossary of words and phrases meant to serve as first aid to any one wishing to make himself understood in the official language of the U.S.S.R.

Russian grammar and morphology are not formally studied in this course. Students wishing to embark upon a thorough training in the language for research, cultural, or business reasons are advised to enroll in Russian 1a, which strives to

ground the student systematically in the fundamentals of Russian grammar with a view to the eventual mastery of the language both as a tool and a source of pleasure.

Spanish

1a. First-Semester Spanish.* 4 credits.

1b. Second-Semester Spanish.* 4 credits.

Prerequisite: Spanish 1a or one year of high-school Spanish.

10a. Third-Semester Spanish.* 3 credits

Prerequisite: Spanish 1b or two years of high-school Spanish.

10b. Fourth-Semester Spanish.* 3 credits.

Prerequisite: Spanish 10a or three years of high-school Spanish.

**16a. Elementary Composition, Conversation,
and Grammar Review.*** 2 credits.

This is a supplementary course to be taken with Spanish 10. It is not open to students who have had the equivalent of two years of college Spanish, except by special permission.

Prerequisite: Spanish 1b or two years of high-school Spanish.

**16b. Elementary Composition, Conversation,
and Grammar Review.*** 2 credits.

This is a continuation of Course 16a. It is open to properly qualified new students.

21a. Elementary Survey of Spanish Literature.* 3 credits.

Spanish 21 comprises a brief study of the history and the development of all types of Spanish literature—the epic, the drama, prose writings, lyrics, the novel—covering the centuries from 1140 to the present. This study is centered around and illustrated by the reading and interpretation of representative works of each type.

Prerequisite: Spanish 10b or four years of high-school Spanish.

21b. Elementary Survey of Spanish Literature.* 3 credits.

This is a continuation of Course 21a. It is open to properly qualified new students.

50a. Practical Spanish. No credit.

In this course the student gets immediate practice in learning to speak and understand the everyday Spanish of our neighbors to the South. Much interesting and up-to-date in-

formation on Central and South American countries is given in Spanish, with the help of slides, films, pictures, and music. Songs and games are also used. The class period is divided into two parts: (1) A recitation period, consisting of active drill and student participation; (2) a lecture period, consisting of an illustrated talk by the teacher and discussion of the material presented in the talk and in the accompanying lesson-sheet. (No tests nor examinations.)

MATHEMATICS

All courses offered by the Department of Mathematics require **mathematical preparation** consisting of a minimum of one unit of algebra and one unit of plane geometry.

OM. Review of Algebra.

No credit.

This course meets five hours a week for seven weeks, and consists of a review of factoring, fractions, exponents and radicals, and quadratic equations.

1M. College Algebra.*

4 credits.

The topics studied include number systems, factoring, fractions, exponents and radicals, functions and graphing, linear and quadratic equations, polynomials of higher degree, systems of equations, determinants, binomial formula, logarithms, progressions, permutations, combinations, and probability.

Prerequisites: One year or one and one-half years of high-school algebra and one year of plane geometry.

2M. College Algebra.*

3 credits.

There will be a brief review of factoring, fractions, and exponents and radicals followed by an examination on these topics. Those who fail the examination will be advised to take College Algebra OM-2M, while those who pass will study the following topics: Functions and graphing, linear and quadratic equations, polynomials of higher degree, systems of equations, determinants, binomial formula, logarithms, progressions, permutations, combinations, and probability.

Prerequisites: One and one-half or two years of high-school algebra and one year of plane geometry.

3M. Plane Trigonometry.*

2 credits.

The course consists of both the analytical and computational parts of plane trigonometry with emphasis on the analytical part.

Prerequisites: Two years of high-school algebra and one year of plane geometry, or college algebra, or concurrent registration in Algebra 2M.

Analytic Geometry, see Mathematics 52, page 51.

Calculus, see Mathematics 102a and 102b, page 51.

POLISH, see page 65.

POLITICAL SCIENCE

7. American Government and Politics.* 3 credits.

This course is an introduction to the organization and the chief problems of American national politics. Attention is paid to the functional activities of national government and to the controversies aroused by increasing federal regulation and control of business. Emphasis is placed upon the social and economic forces which condition or determine governmental forms and activities.

The course is open to freshmen.

13. Municipal Government.* 3 credits.

The organization and politics of city government are taken up in this course.

Prerequisite: Sophomore standing.

25. Survey of World Politics.* 3 credits.

Course 25 is an analytical introduction to the basic factors of international relations. A survey is made of the international political effects of: Nationalism; imperialism; modern ideologies; and of various other conditioning factors such as race, population, geography, trade, war, diplomacy, international law and the United Nations.

Prerequisite: Sophomore standing.

27. Modern Foreign Governments.* 3 credits.

A survey is made of the governments of Great Britain, France, Italy, Western Germany, the Soviet Union, and other countries, comparing the organization and problems of foreign governments with similar problems in America.

Prerequisite: Sophomore standing.

122. Political Parties and Public Opinion.* 3 credits.

This course consists of a description and critical examination of political parties, public-opinion polls, and pressure groups in the United States.

Prerequisite: Sophomore standing.

135. Municipal Administration.* 3 credits.

In this course a study is made of the structure and functions of municipal administration.

Prerequisites: Political Science 7 and sophomore standing; or Political Science 13 or 143, or consent of the department chairman.

PSYCHOLOGY

1. Introduction to Psychology.* 4 credits.

This is a survey course in the field of psychology. The fundamental laws, applications, relations to other sciences, and fields of specialization are stressed. The specific topics covered include psychological and neurological basis of behavior, learning and habit formation, perception and language, thinking, personality and character.

Prerequisite: sophomore standing.

105. Psychology of Human Adjustment.* 3 credits.

Topics discussed: Mental hygiene; personality adjustment and maladjustment; fears, anxiety, and compulsions; repression, fantasy, and compensation; malingering, hysteria, hypnosis, sleep, and dreams; analysis and rehabilitation of personality.

Prerequisite: Psychology 1 with a grade of at least C.

(For other courses in Psychology, see page 80.)

READING

1. Reading Efficiency. No credit.

This introductory course is designed to improve reading speed and comprehension. It emphasizes principles of reading, study techniques, vocabulary development, methods of speed building, and improvement of comprehension in the following areas: Sentence and paragraph understanding, retention of detail, understanding definitions, following directions, understanding principles, and apprehending relationships.

RUSSIAN, see page 66

SOCIOLOGY AND ANTHROPOLOGY

1. Man and Society: An Introduction to Sociology.* 3 credits

This is an introductory course to the study of sociology and is required of students majoring in sociology. The course deals with the environmental, racial, and psychological foundations of society. A study is made of the fundamental social institutions and of how these institutions adapt themselves to the demands of changing conditions of life and living. The lectures, readings, and discussions are planned to make clear the nature of the organization of our social structure and the means by which the members of society are controlled and directed.

The course is open to freshmen.

2. Social Disorganization.*

3 credits.

This course deals with the nature of social change and the problems of social adjustment; problems of population; eugenics; race relations; problems of the family, changing status of women and children; social hazards of industrial life; group conflict; war; dependency and correction; problems of socialization. The lectures, readings, and discussions are planned to reveal how the social order is constantly changing and in what direction sound adjustments are tending.

The course is open to freshmen.

3. Man and Culture: An Introduction to Anthropology.*

3 credits.

This course is planned to give the general student an understanding of man in relation to the cultures he has built. It deals with man's evolutionary development, his capacities for society, and the development of the world's major cultures.

The course is open to freshmen.

124. The Modern City.*

3 credits.

The following subjects are covered: Urban institutional and personality patterns, folkways, and mores; ecological process and structure; the city as center of dominance over a trade area and hinterland.

Prerequisites: Sociology 1, 2, or 10, or an introductory course in economics, political science, or geography, *and* sophomore standing.

139. Social Psychology.*

2 credits.

In our modern world of increasing complexity, human behavior varies directly with increasing participation in a variety of group ideas and social situations.

Social behavior, as related to emotions, habits, fantastical and objective thinking on the one hand, and to prejudice, mental epidemics, propaganda, mobs, crowds, audiences, on the other, is analyzed.

Prerequisites: Sociology 1 and sophomore standing or Psychology 1.

159. Sociology of the Family.*

2 credits.

This course treats of the family as a social institution. The following subjects are covered: The family's place in different cultures and social strata; the impact of industrialization and urbanization upon family life; family functions: procreation, education, production, and consumption; the family in transition.

Prerequisites: Sociology 1 or 2 or Anthropology 3, and junior standing.

161. Criminology.*

2 credits.

Course 161 deals with crime and criminals: Extent, costs, causation, punishment and treatment, institutions, probation and parole, and the courts.

Special attention is given throughout to the problem of juvenile delinquency and its bearing on the problem of crime as a whole.

Prerequisites: Sociology 2 and junior standing, or consent of the instructor.

164. Racial and Minority Groups in the United States.*

2 credits.

Topics discussed: Social and economic adjustments between whites, Negroes, Mexicans, Asiatics; recent Negro migrations to cities; Jews; the foreign-born; war refugees.

Prerequisites: An introductory course in sociology, anthropology, or psychology, and junior standing, or consent of the instructor.

SOCIAL WORK, see page 74.

SPANISH, see page 67.

SPEECH, see page 44.

OFF-CAMPUS GRADUATE STUDY

The Graduate Faculty of the University of Wisconsin has authorized the teaching of courses off the Madison campus. Graduate credit obtained from such courses is applicable only to the Master's Degree. The establishment of this program extends the boundaries of the Graduate School beyond the limits of the Madison campus and provides an opportunity for advanced study to persons who are unable to complete on the Madison campus all the requirements for the Master's Degree. All off-campus instruction is given by members of the Graduate Faculty of the University of Wisconsin or by members of the faculties of other institutions who have been approved as graduate lecturers.

A maximum of one semester of residence credit may be granted for off-campus courses in Milwaukee. Students who are fully employed may take only one course for **two** or **three** credits per semester and receive three weeks of residence credit. No residence or course credit will be given for such work until the student has been admitted to the Graduate School and has earned a minimum residence credit of one-half a semester (one summer session) for graduate work on the Madison campus. If the student has taken off-campus courses at the graduate level before meeting these requirements, a transcript from the Extension Division for such work must be submitted with his other credentials when he applies for admission to the Graduate School. In other words a student need not make formal application for admission into the Graduate School until he is ready to begin his work on the Madison campus.

For admission requirements and further information about graduate study see the bulletin of the Graduate School.

(For the Milwaukee Evening Graduate Program in Engineering, see page 74.)

(For Social Work, see page 74.)

EDUCATION

Course descriptions will be contained in the Supplementary Bulletins, which are issued at the beginning of each semester.

MATHEMATICS

Mathematics 110, 111, 116a, and 116b may be taken for graduate credit and are described on page 52.

MILWAUKEE EVENING GRADUATE PROGRAM IN ENGINEERING

This program is being offered by the College of Engineering and Graduate School of the University of Wisconsin in cooperation with the Milwaukee Extension Division to meet the needs for a graduate evening program in engineering in the metropolitan Milwaukee area.

Under this program Master of Science degrees in Electrical Engineering, Mechanical Engineering, Metallurgical Engineering, and Engineering Mechanics may be earned by qualified engineers through part-time evening study in Milwaukee.

Twenty-four credits of graduate work including thesis are required for the Master's Degree. This work can be completed in a minimum time of two years by taking six credits per semester, or may be carried out at a reduced pace.

Students wishing to enter this program should send an application for admission to the Graduate School at Madison as soon as possible. Transcripts of all previous undergraduate and graduate work (if not taken at the University of Wisconsin), together with a letter from the student's employer indicating that satisfactory arrangements will be made to carry on his thesis work, must accompany the completed application form.

After the candidate has been notified that he has been admitted to the Graduate School and has received his permit to register, he will go to Madison on the designated day to register and to consult with his major professor, who will advise him on his program of courses and direct his research and thesis work.

At the beginning of each subsequent semester the candidate will go to Madison to register and consult with his major professor.

Students who wish to receive additional information should consult Professor J. G. Van Vleet, Chairman of the Department of Mechanical Engineering, Milwaukee Extension Division.

Courses are described in the special Bulletin of the College of Engineering on the Milwaukee Evening Graduate Program. Copies of the bulletin and the application for admission form may be obtained in the Registrar's Office, 623 West State Street.

SOCIAL WORK

A maximum of twelve credits toward the Master's Degree in Social Work may be earned through part-time study. Field work courses will not be available to part-time students nor may more than one semester's course in Case Work Theory or Social Psychiatry be included in the twelve hours of credit. The department reserves the right to restrict the number of

courses a part-time student may take during any semester. Residence toward an advanced degree cannot be established on a part-time basis.

All students who wish to enroll must consult a member of the department before registering.

The Department of Social Work of the University of Wisconsin offers in Milwaukee a full-time program leading to the degree of Master of Science in Social Work. Information concerning this program and descriptions of both day and evening courses are contained in the special bulletin of the Department of Social Work.

LIBERAL EDUCATION

Art Appreciation: European Painting from the Renaissance up to 1800.

The lectures trace the rise of European painting from its beginning about the year 1300 up through the glorious Italian Renaissance, and on up from school to school to the threshold of the modern period around the year 1800. Primary attention is given to the Italian School as the springboard for further development. Many of the great Old Masters are considered in close detail. All of the lectures are illustrated by beautiful slides in full, natural color.

The lectures are as follows: 1-2. Italian Painting of the Early Renaissance. 3. Italian Painting of the High Renaissance. 4. The Flemish School of Painting. 5. The German School of Painting. 6. The Spanish School of Painting. 7-8. The Dutch School of Painting. 9. French Painting of the 15th, 16th, and 17th centuries. 10. French Painting of the 18th century. 11-12. English Painting of the 18th century.

Art Appreciation: European Painting Since 1800, and the American School.

The first six lectures follow the development of European painting through the modern period, from about 1800 up into the twentieth century. Focus of attention is on the School of Paris, showing its varied phases and complexity. The leading painters are considered and outstanding examples of their work are shown. The remaining six lectures trace the rise of native American expression from the early eighteenth century up to the present day, with primary attention on painting of the past two decades. All lectures are illustrated with colored slides.

The lectures are as follows: 1. David and Delacroix, Champions of Rival Movements. 2. Mid-19th Century Masters, and the Early Manet. 3. The Late Manet, Monet, and other Impressionists. 4. The Beautiful Achievement of Degas and Renoir. 5. Cezanne, Gauguin, and Van Gogh. 6. Painters of France and Other Countries of the Late 19th and Early 20th Centuries. 7. American Painting from about 1725 to about 1850. 8. American Old Masters and Expatriates. 9. Men of Rebellion and a Clipper Ship Retrospective. 10. American Painters Born in the 1880's. 11. American Painters Born in the 1890's. 12. American Painters Born in the 20th Century, and a few Wisconsin painters.

Enjoyment of Modern Painting I.

This is an illustrated lecture course leading toward an informed and sympathetic understanding of the various modern art movements. Masterpieces of the late nineteenth century

French revolutionaries and their antecedents are shown. The aims of Impressionistic leaders like Monet and Renoir are contrasted with the expressions of the triumvirate of rebels, Cezanne, Van Gogh, and Gauguin. Seurat's magnificent "Sur la grande Jatte" and the achievements of other Post-impressionists are studied. The works of the "Fauves" and the "Blaue Reiter," of the cubists like Picasso and Braque as well as the surrealist manifestations of a vitriolic Grosz and an extroverted Dali are evaluated. Modern natural primitives of Henri Rousseau's type will be contrasted with dadaists like Hans Arp and pure abstractionists like Piet Mondrian.

Enjoyment of Modern Painting II.

The students consider the Armory Show of 1913 and American realists like Sloan and Luks, and watch the rapid growth of many vigorous American painters. They view outstanding works by the regionalists Benton, Curry, and Wood, individualists like Hartley and Marin, propagandists such as Gropper, experimentalists like O'Keefe and compare current expressions of pioneer moderns of Max Weber's stature with the highly personalized statements of newcomers like Morris Graves and Darrel Austin. Latin American masters studied include Rivera, Orozco, and Portinari. The lectures of the second semester stress the kaleidoscopic nature of significant modern ideologies in American painting and the appreciation of notable artistic achievements.

Essentials of Home Building.

The aim of this course is to offer the prospective home builder professional advice regarding the proper procedure in building a home and to give sufficient information to enable him to proceed with confidence and understanding. The discussions cover fundamental considerations in the choice of site, development of plan, letting of contracts, etc. and take up in detail the materials of construction used in the various branches of the work. The course covers the essentials of good exterior and interior design as well as the fundamentals of interior decoration and landscaping. Special emphasis is placed on the relation between owner and contractors with the intention of minimizing possible misunderstandings due to misinterpretation of the plans, specifications, and contracts.

Interior Decorating.

This course is designed to aid persons who are interested in beautifying their homes. The following subjects are discussed: Points to check on the blueprints; remodeling and rejuvenating for comfort and beauty; color schemes and styles and how they affect backgrounds (floors, walls, woodwork); furniture arrangements according to use; rugs, carpets, and other floor coverings; window treatments with and without draperies; upholstery and

drapery materials and their use according to type of furniture for slip covers and upholstery; accessories, selection and arrangement; how to buy furniture.

Investigating the News.

This is not a course of prearranged lectures. The matters to be investigated are selected from what is of current interest. Historians, sociologists, economists, political scientists, and natural scientists from our staff and the city will lecture on the significance and background of various contemporary developments. Group discussion follows every lecture.

Landscape Design for the Country Home.

With the coming of new home building, many people are moving into the country to enjoy greater living space. Although larger plots allow for considerable individual expression in landscaping, they also increase the hazards in good overall planning. Costly mistakes can be made in grading, soil conservation, and overplanting, and it is not always recognized that quite often the best use of the site depends not so much upon what is added as upon how well that which is already there is treated and incorporated into the plan for living.

If, for financial reasons, landscaping cannot be completed at once, it is important that a well-considered plan be developed before the initial work is begun. It is economical and satisfying for the home owner to have a carefully arranged program on which to budget his time and resources over a period of years, one which will show him where each unit fits and its relationship to the picture as a whole, and which will helpfully guide him in purchasing materials and hiring extra labor as it is needed.

In this course the major problems in site planning are discussed in detail: Contourscaping, tree and ground cover conservation, the best utilization of views and exposures, the functional possibilities of the spaces involved, walls and terraces, selection of trees and shrubs, and the integration of landscaping with architectural design.

Latin American Tour (in color).

Since everyone today is interested in Latin America but not many are privileged to go there in person, an illustrated, personally conducted tour through these interesting countries has been planned. Each of the twenty Latin members of the Pan American Union will be visited: From Puerto Rico through the islands of the Caribbean Sea; from Mexico through the small republics of Central America; then down through South America to the southern tip of the hemisphere. A careful study of the historical and cultural background of these nations may lead to a better understanding of them and of our relations with them. The colored slides include beautiful scenes in city

and country, which show the people at work and at play, and illustrate the principal customs, industries, and products. Many of these products were brought to Spain and to other European countries by the "conquistadores" to become the source of new foods that America gave to the world. The slides will also include views of the amazing ruins of magnificent palaces, temples, and observatories built thousands of years ago by Indians of highly civilized tribes.

Life Drawing and Painting.

The course covers the fundamentals of drawing from the nude and costumed figure and includes problems in figure construction and art anatomy. Students may work in black and white or in color. The course has been planned to provide the proper background for those desiring to acquire skill in figure drawing and sketching as an avocation as well as for the more advanced student who wishes to continue his studies under competent guidance.

Note: Because of the nature of the course no visitors are permitted.

Mental Hygiene I.

The purpose of this series of lectures is to present in a non-technical manner modern views as to the nature of personality deviations and mental disease, their causative factors, their care and treatment in the hospital and outside, and the measures which can be taken for their prevention.

Mental Hygiene II.

This course is a continuation of Mental Hygiene I and includes case presentations for study and discussion.

Period Furniture.

The course consists of illustrated lectures on the following styles in furniture: Italian and Spanish Renaissance; English Renaissance and Tudor; Jacobean, Cromwell and Charles II; Anglo-Dutch; Chippendale; Hepplewhite, Adam and Sheraton; French: Louis 14, 15, and 16; Directoire and Empire; French Provincial; Early American; Colonial and Duncan Phyfe; Victorian and Modern.

Photograph Tinting for Beginners.

This course takes up the simple tinting of photographs with oil paints, and familiarizes the student with the basic problems

involved: Techniques, procedures, and materials. It is recommended as a preparatory course for non-professional students who wish to learn photograph painting.

Problems of Personality Adjustment.

This series of lectures deals with the most common problems of personal behavior. The following subjects are considered: What constitutes a personality trait; how to appraise personality patterns; the difference between normal and abnormal behavior; the process of personality adjustment through compensation, rationalization, projection, and identification; the "Inferiority Feeling" and what it means for the development of defensive reactions; the withdrawing type; some manifestations of mental conflicts, leading to psychoneurotic or psychotic behavior; and the role of mental hygiene in our society. The lectures are illustrated with films showing various forms of human behavior such as aggression, hostility, rejection, and over-dependency.

Psychology of Human Behavior I.

This course deals principally with the ways in which human beings meet difficulties. It discusses such topics as: What is mental health; the basic modes of adjustment; mental conflicts; the formation of habits; security; inferiority, rationalization, fantasy, compensation; ourselves and others; the function of philosophy and religion. Some attention is given to the views of Freud, Jung, and Adler.

Psychology of Human Behavior II.

This course is devoted to a study of the nature and distribution of individual differences such as intelligence, emotions, motivation, interests, and aptitudes. Consideration is given to the relationship existing between these phenomena and successful living in the family, on the job, and in the community. Class lectures are supplemented by visual aids and field trips.

Psychology of Human Behavior I is not required of students who wish to take Course II.

Shakespeare.

The course consists of a series of lectures tracing Shakespeare's development as a man and as an artist. The lectures review Shakespeare's work as a whole, but they concentrate on some nine or ten plays which are representative of the various types with which he worked and of the various aspects of his career. Although students can take the course and do no re-

quired reading, a list of suggested readings will be supplied, and it is strongly urged that the members of the course do as much of the reading as it is feasible for them to do.

For Art Education, see page 56.

For English, see pages 23 and 59.

For Journalism, see page 64.

For Practical Spanish, see page 67.

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SCHEDULE

The First Semester Schedule will be printed in the Sunday Milwaukee Journal and Milwaukee Sentinel, September 10.